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ABSTRACT

This task-based curriculum guide for agricultural production, specifically for beef livestock, is intended to help the teacher develop a classroom management system where students learn by doing. Introductory materials include a Dictionary of Occupational Titles job code and title sheet, a task sheet for developing leadership skills, and a task list. Each task is then outlined in this format: statement of duty, statement of task, duty and task numbers, a checklist of achievement indicators, a statement of the criteria for achievement of competence, specification of required tools and equipment and resources, and lists of teacher activities and student learning activities. The tasks are categorized by eight duties: breeding, caring for, and feeding beef cattle, maintaining beef health, maintaining beef facilities, marketing and showing beef cattle, and using employability skills. Other contents include student and class achievement records and tool/equipment lists. (YLB)

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INTRODUCTION

This curriculum guide was developed through a grant awarded to the Agricultural and Extension Education Department (AEE), College of Agriculture and Natural Resources, Michigan State University, by the Vocational-Technical Education Service of the Michigan Department of Education (V-TES/MDE).

The credit for this curriculum guide belongs to:

(1) A task force of individuals from education who reviewed job titles, worker tasks, and developed achievement indicators, criteria statements, tools/equipment, references and resources;

(2) The Vocational-Technical Education Service, Michigan Department of Education consultant responsible for the program area; and,

(3) The project coordinator from AEE.

The names of these people are identified after this section. The following describes the role of each of those credited above in developing the curriculum guide.

(1) The task force members identified occupational titles appropriate to the agriculture program area. This process was facilitated by using materials developed by the Vocational-Technical Education Consortium of States (V-TECS).

(2) The V-TES/MDE curriculum consultants provided overall guidance for the project. This responsibility included nominating the task force members, and working with the AEE staff to determine the direction, format, and content of the curriculum guide.

(3) The project coordinator in AEE was responsible for developing the format of the curriculum, working with the members of the task force to ensure the quality of the curriculum as well as that the final curriculum guide was produced on schedule. The work of the project coordinator was made considerably easier because of the close collaboration of the V-TES/MDE curriculum consultant. This whole effort was a partnership and could not have been completed without this arrangement.

Credit should also be given to the secretaries and other support staff who typed and proofread the curriculum guide at its various stages of development. Without their assistance this effort would never have been completed.

It is intended by all those involved in the development of this curriculum guide that it be used to provide relevant training for entry to the world of work. It is hoped that this curriculum guide is used to that end.

This curriculum guide is one of a series of nine developed for Production Agriculture, C.I.P. 01.0301. A complete Production Agriculture program will use all nine guides: Beef, Sheep, Dairy, Poultry, Swine, Crops, Soils, Farm Business Management, and Farm Mechanics. A listing of Dictionary of Occupational Titles (DOT) job titles associated with these guides is listed below.

D.O.T. TITLE	D.O.T. #
FARM MACHINE OPERATOR	409.683-010
LIVESTOCK RANCHER	410.161-018
POULTRY FARMER	411.161-018
FARMWORKER: POULTRY	411.584-010
LABORER: POULTRY FARM	411.687-018
FARMER: VEGETABLE	402.161-010
SUPERVISOR: TREE-FRUIT-AND-NUT	403.131-010

D.O.T. TITLE	D.O.T. #
FARMER: FIELD CROP	404.161-010
FARMER: GENERAL	421.161-010
FARM WORKER: LIVESTOCK	410.664-010
CATTLE RANCHER	410.161-018
SWINE RANCHER	410.161-018
SHEEP RANCHER	410.161-018
SHEEP HERDER	410.687-022
DAIRY FARMER	410.161-018
FARMWORKER: DAIRY	410.684-010
FARMER: CASH GRAIN	401.161-010
GENERAL MANAGER: FARM	180.167-018
TRACTOR MECHANIC	620.281-058
TRACTOR-MECHANIC HELPER	620.684-030
FARM-EQUIPMENT MECHANIC 1	624.281-010
FARM-EQUIPMENT MECHANIC APPRENTICE	624.281-014
FARM-EQUIPMENT MECHANIC 2	624.381-014
FARMWORKER: GENERAL I	421.683-010
FARMWORKER: GENERAL II	421.687-010

Development of leadership skills as well as technical skills has always been an important part of the vocational agriculture training program. Today's agriculture is very complex, being able to participate, communicate and lead is even more critical now than in prior years. Tomorrow's producer must be able to take an active role in the profession and society.

Recognizing the importance of preparing the decision makers of tomorrow, the duty of "Performing Leadership Skills" is included in all nine curriculum guides. The student is not expected to complete all ten achievements in one year, but should have completed most of them when they have completed the total agriculture program.

Participation in Future Farmers of America (FFA) activities will enhance

the development of those important leadership skills. It is suggested that this duty/task be reproduced and placed in each individual student file.

The following people were instrumental in the development of the Agriculture Curriculum Guides.

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Duty: Performing Leadership Skills	**Duty No.**
	Task No.

Task: Develop leadership skills to provide leaders in agriculture.

Achievement Indicators: The learner:	Yes	No
1. Performed ten Parliamentary Procedure Skills -	____	____
2. Gave a five minute speech -	____	____
3. Led a group discussion for 15 minutes -	____	____
4. Served as an FFA officer -	____	____
5. Served as a Program of Activities Committee Chairperson -	____	____
6. Served as an active member of a committee -	____	____
7. Participated in five activities above chapter level -	____	____
8. Participated in carrying out activities as listed in the program of activities -	____	____
9. Prepared a twelve minute demonstration -	____	____
10. Attended leadership meetings -	____	____

Criteria: Competence in the task will be recognized when the instructor is satisfied with leadership performance of the student.

Tools and Equipment:	**Resources:**
FFA Record Book Tape Recorder Video Tape	FFA Student Handbook Robert's Rules of Order FFA Degree Application FFA Manual

TASK LIST
FOR
BEEF

A. BREEDING BEEF

1. Plan breeding system, using appropriate resources, to acquire desirable heritable characteristics into herd.

2. Select breeding stock, using production pedigree and health records, to acquire desirable, heritable characteristics into herd.

3. Keep breeding and calving records, using appropriate resources, to establish a desirable breeding herd.

4. Determine number of bulls needed for cow herd, using appropriate records, to acquire desired inventory.

5. Determine when to breed cows and heifers, using appropriate records, to develop a desirable breeding schedule.

6. Keep record of due dates for cows and heifers, using appropriate resources, to develop a desirable calving schedule.

7. Select feeder animals, using appropriate resource, to acquire efficient marketable animals.

8. Select breeding stock for embryo transfer, using appropriate records, to identify select sires and dams.

9. Detect heat in cows and heifers, using appropriate records and techniques, to determine the date and time for breeding.

10. Breed cows and heifers, using appropriate achievement indicator techniques and equipment, to achieve fertilization.

11. Arrange pregnancy check for bred cows and heifers, using appropriate techniques and records, to determine pregnant cows and heifers.

12. Store semen, using appropriate methods, to preserve quality semen until used.

13. Cull animals, using appropriate records, to maintain desirable heritable characteristics in herd.

B. CARING FOR BEEF

1. Plan livestock operation goals for the farm, using factors of production and records, to establish a desirable beef production unit.

2. Make inventory list such as cattle, equipment, etc., using records, to establish a current history.

3. Prepare production performance records, using appropriate resources, to establish system of performance indicators.

B. CARING FOR BEEF (continued)

4. Identify animals, using appropriate records, to maintain herd performance.

5. Assist animals in delivering young, using appropriate techniques, to deliver a healthy calf.

6. Remove afterbirth, using sanitary methods, to secure a healthy cow.

7. Check mother's milk supply using appropriate techniques, to obtain a healthy calf.

8. Wean calves, using appropriate technique and equipment, to ensure a healthy calf.

9. Record weaning weights of calves, using appropriate resources, to maintain records.

10. Weigh animals, using appropriate equipment, to maintain records.

11. Move feeder animals to feedlot, using appropriate resources, to ensure healthy, uninjured animals in the feedlot.

12. Fill out application for registration with purebred cattle association, using appropriate forms and records, to establish a purebred herd.

13. Dispose of unused chemicals and drugs, using appropriate equipment, to ensure a healthy environment for the herd.

14. Store chemicals, inflammable materials and medications, using appropriate resources and instructions, to ensure safe environment.

15. Care for animal's feed, using appropriate equipment, to maintain healthy animals.

C. FEEDING BEEF

1. Balance ration and creep feed calves, using appropriate records and other resources, to assure desired performance.

2. Balance and feed ration to beef bulls, using appropriate records and other resources, to assure desired performance.

3. Balance and feed ration to beef show animals, using appropriate records and other resources, to assure desired performance.

4. Balance and feed ration to fattening cattle, using appropriate records and other resources, to assure desired performance.

5. Balance and feed ration to replacement heifers, using appropriate records and resources, to assure desired performance.

6. Balance and feed ration to weaned beef calves, using appropriate records and resources, to assure desired performance.

C. FEEDING BEEF (continued)

7. Balance and feed ration to wintering brood cows and heifers, using appropriate records and resources, to assure desired performance.

8. Balance and feed ration to gestating brood cows and heifers, using appropriate records and resources, to assure desired performance.

9. Balance and feed ration to lactating brood cows and heifers, using appropriate records and resources, to assure desired performance.

10. Prepare beef feeding records, using appropriate resources and calculations, to provide desired records of proficiency.

11. Select feeding methods, using appropriate resources, to provide for maximum cost effectiveness and performance of animals with minimum feed wastage.

12. Calculate the cost of gain on feeder steer operation, using appropriate records and resources, to reflect total pounds of gain and all feed and non-feed costs.

13. Calculate cost of rations and feed mixtures, using appropriate resources, to express values and quantities in dollars per hundred weight without error.

14. Implant feeder steers with growth stimulant, using desirable equipment, supplies and techniques, to assure a properly implanted pellet.

15. Determine feeding and watering space requirements, using appropriate resources, to maximize performance.

16. Examine feedstuffs for mold and spoilage, using appropriate techniques and equipment, to identify hot areas, sprouted grains and off color.

17. Precondition animals for shipping, using appropriate resources and techniques, to assure top performance of animals upon arrival at destination.

18. Service grinding and mixing equipment, using appropriate equipment, to assure full and effective operation.

19. Service bulk feed handling equipment, using appropriate equipment, to assure full and effective operation.

20. Prepare ration for beef, using appropriate resources, to provide desired nutrients and antibiotics according to life stage of beef.

C. FEEDING BEEF (continued)

21. Order feed, using appropriate resources, to assure continuous feed supply.

D. MAINTAINING BEEF HEALTH

1. Examine beef for external parasites, using appropriate resources, to determine suspect cattle.

2. Apply insecticides in buildings, using appropriate equipment, to maintain herd health.

3. Dust cattle, using appropriate resources, to maintain herd health.

4. Spray cattle, using appropriate resources, to maintain herd health.

5. Examine beef for internal parasites, using visual appraisal, to determine suspect cattle.

6. Deworm with paste/bolus, using appropriate methods, to ensure herd health.

7. Drench cattle, using appropriate resources, to maintain herd health.

8. Treat cattle for internal parasites, using appropriate resources, to maintain herd health.

9. Plan a general health program, using appropriate resources, to ensure a healthy beef herd.

10. Take temperature of sick animal, using appropriate resources, to determine whether medication is required.

11. Administer medication by injection, using appropriate resources, to ensure proper dosage and adminstration.

12. Administer medication to animals orally, using appropriate resources, to ensure successful administration without harming the animal.

13. Applied medication to cuts and bruises, using appropriate resources, to ensure quick healing and less infection.

14. Treat cattle for contagious diseases, using appropriate resources, to ensure herd health by limiting contamination.

15. Treat calves for scours, using appropriate resources, to obtain a healthy calf.

16. Vaccinate calves for black leg, using appropriate resources, to ensure healthy calves.

17. Vaccinate calves for leptospirosis and anaplasmosis, using appropriate resources and recommendation, to ensure herd health.

D. MAINTAINING BEEF HEALTH (continued)

18. Vaccinate heifers for Brucellosis (Bang's Disease), using appropriate resources and regulations, to ensure herd health.

19. Clip naval, using appropriate techniques, to maintain sanitary conditions.

20. Castrate animals with elastrator, using appropriate methods, to ensure both testes are pressed through the elastrator rings at the lower end of the scrotum.

21. Castrate animals with knife, using appropriate method, to ensure complete removal of testicles and membrane covering.

22. Dehorn animals, using appropriate resources, to ensure the horns are removed and hemorrhaging is controlled; to assure safety of handlers and other animals.

23. Treat bloated animals, using appropriate resources, to correct rumenal size.

24. Implant magnets, using appropriate methods, to ensure swallowing and placement.

25. Isolate newly purchased animals, using appropriate resources and methods, to ensure herd health.

26. Separate sick, weak or injured animals, using appropriate equipment and resources, to maintain herd health.

27. Treat cattle for foot rot, using appropriate resources and recommendations, to ensure clean and dry feet.

28. Treat cattle for maggots, using appropriate resources and methods, to correct and maintain animal health.

29. Treat cattle for pink eye, using appropriate resources and recommendations, to correct animal vision.

30. Treat cattle for pneumonia, using appropriate resources and recommendations, to correct and ensure animal health.

31. Treat cattle for shipping fever, using appropriate resources and recommendations, to ensure animal health.

32. Treat cows for mastitis, using appropriate resources and recommendations, to correct cow's milk.

33. Dispose of dead animals, using appropriate resources, to avoid contamination of water or feed supply and prevent access to carcass by livestock or predators.

34. Disinfect building and equipment, using appropriate resources, to ensure a sanitary environment.

35. Clean housing, using appropriate resources to ensure a sanitary environment.

E. MAINTAINING BEEF FACILITIES

1. Plan for housing for cow and calf herds and cattle feed lot, using appropriate resources, to assure desirable housing unit.

2. Clean and adjust waterers for beef, using appropriate tools and equipment, to maintain desirable water level.

3. Construct feed trough, using appropriate tools and equipment, to prevent cattle or calves from throwing feed out.

4. Construct creep feeder, using appropriate tools and equipment, to permit calves to feed while excluding cows.

5. Construct loading chute, using appropriate tools and equipment, to accommodate cattle and prevent slipping.

6. Build trim chute, using appropriate tools and equipment, to assure that each animal is held securely.

7. Construct back-scratcher for insecticide application, using appropriate tools and equipment, to apply desirable amount of insecticide.

8. Plan waste disposal system, using appropriate resources, to assure an efficient, cost-effective system that meets local/state/federal pollution standards.

9. Remove wastes, using appropriate resources, to maintain a clean beef yard within local/state/federal pollution standards.

10. Apply wastes to fields, using appropriate equipment, to assure an efficient, cost-effective and pollution-free method.

F. MARKETING BEEF

1. Consign outstanding animals to sale, using appropriate records and contract, to maintain identity of cattle.

2. Plan marketing schedule, using marketing goals, objectives and resources, to ensure the best feasible return to the farm enterprise.

3. Calculate expected returns and profits on sales, using appropriate records, to determine total expenditures and net returns.

4. Calculate shrinkage, using appropriate resources, to assure minimum weight loss.

5. Estimate market grades, using appropriate resources, to determine market value.

6. Select markets, using appropriate resources, to ensure the highest return when compared to alternative markets.

7. Sort and mark steers for market, using appropriate resources, to assure animals are seperated in designated weight categories.

F. MARKETING BEEF (continued)

8. Cull animals for sale, using appropriate resources, to assure animals are ready for market.

9. Prepare carriers for hauling animals, using appropriate resources, to provide animals with clean and safe transportation.

10. Load animals, using appropriate resources, to ensure the number and safety of cattle loaded.

G. SHOWING BEEF

1. Select animals for showing, using appropriate resources, to have the highest quality animal in both type and pedigree.

2. Select equipment for fitting and showing, using appropriate resources, to assure that the animal can be prepared and presented well.

3. Train animal for showing, using appropriate resources, to assure that the animal is well behaved and presented to their best advantage.

4. Transport animals to show, using appropriate resources, to assure safety and health of animals at destination.

5. Groom beef for show, using appropriate resources, to present animal to its best advantage.

6. Prepare facilities (pen, stall, etc.) at show, using appropriate resources, to assure that animal will remain clean and healthy.

7. Prepare exhibitor to show, using appropriate resources, to assure that both exhibitor and animal are presented appropriately to the judge.

8. Show animal, using appropriate techniques, to display animal to its best advantage.

H. USING EMPLOYABILITY SKILLS

1. Perform a self-assessment, using knowledge and information, to compile a list of personal attributes.

2. Perform a self-assessment, using knowledge and information, to identify areas of work that will provide personal job satisfaction.

3. Perform a self-assessment, using knowledge and information, to determine methods to reduce levels of stress.

4. Compile an occupational profile, using reference materials, to determine the characteristics, requirements, and employment outlook of an occupation.

5. Investigate non-wage job characteristics, using available resources, to identify significant job factors.

H. USING EMPLOYABILITY SKILLS (continued)

6. Develop goals, using knowledge, to determine career objective(s).

7. Perform a job search, using information, to identify employment opportunities.

8. Participate in an information interview, using knowledge and resources, to obtain information about a job from an employer.

9. Complete a social security form, using information, to apply for a social security number.

10. Contact an employer, using a telephone, to pursue potential employment opportunities.

11. Complete a job application, using personal notes, to apply for employment.

12. Prepare a resume, using personal information, to apply for a job.

13. Write a letter, using personal notes, to apply for a position.

14. Demonstrate appropriate dress, using a knowledge of job requirements, to comply with standards of on-the-job attire and grooming.

15. Interview for a job, using communication skills, to secure employment.

16. Contact a job interviewer, using a telephone, to accept/reject a job.

17. Complete forms, using information, to withhold city, state and federal taxes.

18. Describe performance evaluation measurements, using knowledge, to identify behavior/attitudes that employers expect employees to exhibit on the job.

19. Perform a continuing education program search, using available resources, to identify opportunities for retraining, skills upgrading, and career advancement.

20. Analyze career information, using available resources, to identify the opportunities for advancement that exist within an occupation.

21. Describe job resignation/dismissal practice, using knowledge, to identify positive methods for terminating an employment situation.

Duty: Breeding Beef	**Duty No.** A
	Task No. 1

Task: Plan breeding system, using appropriate resources, to acquire desirable heritable characteristics into herd.

Achievement Indicators: The learner:	Yes	No
1. Evaluated beef enterprise goals -	____	____
2. Identified desired heritable characteristics -	____	____
3. Studied possible breeding systems: e.g., inbreeding, crossbreeding, and upgrading -	____	____
4. Selected desired breeding system -	____	____
5. Selected breed or breeds -	____	____
6. Planned procedures for implementing breeding system -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Beef enterprise goals Inventory of breeding stock	Animal breeding references

Duty: Breeding Beef	**Duty No.** A
	Task No. 2

Task: Select breeding stock, using production pedigree and health records, to acquire desirable, heritable characteristics into herd.

Achievement Indicators: The learner:	Yes	No
1. Selected heifer for breeding -	____	____
a. Studied calving, production, pedigree and health records -	____	____
b. Identified animals possessing desirable physical and production characteristics -	____	____
c. Selected 20% more than the number of animals needed for replacement -	____	____
d. Separated replacement animals from market animals -	____	____
e. Reduced replacement animals' feed intake -	____	____
f. Made final selection at the beginning of breeding season -	____	____
2. Selected bulls for breeding:		
a. Identified sources of breeding bulls -	____	____
b. Studied calving, production, pedigree and health records -	____	____
c. Identified animals possessing desirable physical and production characteristics -	____	____
d. Selected bull -	____	____
e. Developed an adjustment policy with consignor -	____	____

Duty: Breeding Beef	**Duty No.** A
	Task No. 3

Task: Keep breeding and calving records, using appropriate resources, to establish a desirable breeding herd.

Achievement Indicators: The learner:	Yes	No
1. Determined records to be kept and method of summarizing (computer or manual) -	____	____
2. Developed method for collecting data -	____	____
3. Established location for file cabinet, desk and records -	____	____
4. Collected and recorded data -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Record books Calculator or computer File cabinet Desk Scales Ear tags	

Duty: Breeding Beef	**Duty No.** A
	Task No. 4

Task: Determine number of bulls needed for cow herd, using appropriate records, to acquire desired inventory.

Achievement Indicators: The learner:	Yes	No
1. Reviewed cow inventory and breeding schedule -	____	____
2. Calculated number of cows to be bred -	____	____
3. Categorized cows according to age and breeding season -	____	____
4. Identified number of bulls needed for each cow category -	____	____
5. Calculated number of bulls needed for cow herd by size -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Cow inventory Breeding schedule	

Duty: Breeding Beef	**Duty No.** A
	Task No. 5

Task: Determine when to breed cows and heifers, using appropriate records, to develop a desirable breeding schedule.

Achievement Indicators: The learner:	Yes	No
1. Studied production records to establish weight and age of cows and heifers -	____	____
2. Reviewed enterprise goals and breeding system -	____	____
3. Calculated facilties and equipment capacity -	____	____
4. Observed animals for signs of being in heat -	____	____
5. Selected animals in heat with the desired age, weight and physical condition -	____	____
6. Developed breeding schedule (planned time of calving) -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Production records Enterprise goals Breeding system Facilities and equipment inventory	

Duty: Breeding Beef	**Duty No.** A
	Task No. 6

Task: Keep record of due dates for cows and heifers, using appropriate resources, to develop a desirable calving schedule.

Achievement Indicators: The learner:	Yes	No
1. Reviewed breeding date for each animal -	____	____
2. Calculated gestation period -	____	____
3. Identified due dates for each animal -	____	____
4. Recorded due dates -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Breeding dates Record book Calculator Calendar Gestation chart	

Duty: Breeding Beef	**Duty No.** A
	Task No. 7

Task: Select feeder animals, using appropriate resource, to acquire efficient marketable animals.

Achievement Indicators: The learner:	Yes	No
1. Studied grades of feeder calves -	____	____
2. Determined quality of feed available -	____	____
3. Determined quantity of feed available -	____	____
4. Calculated number of animals that can be fed out -	____	____
5. Determined market demands -	____	____
6. Selected feeder calves that met the desired grade based on available feed -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Beef grading sheets Market reports Feed inventory sheets Feeder calves	

Duty: Breeding Beef	**Duty No.** A
	Task No. 8

Task: Select breeding stock for embryo transfer, using appropriate records, to identify select sires and dams.

Achievement Indicators: The learner:	Yes	No
1. Established standards for selection:		
a. Production -	____	____
b. Breed characteristics -	____	____
c. Classification/type score -	____	____
d. Health records -	____	____
e. Breeding records -	____	____
f. Potential marketability if bull calves -	____	____
2. Calculated cost-benefits:		
a. Breeding systems -	____	____
b. Predicted dollar value -	____	____
c. Predicted production -	____	____
d. Predicted genetic value -	____	____
e. Failure costs -	____	____
3. Consulted veterinarian for appraisal of physical condition of initial cows selected -	____	____
4. Made final selection -	____	____

Duty: Breeding Beef	**Duty No.** A
	Task No. 9

Task: Detect heat in cows and heifers, using appropriate records and techniques, to determine the date and time for breeding.

Achievement Indicators: The learner:	Yes	No
1. Observed for heat activity:		
a. Individual behavior -	____	____
b. Herd mate's behavior -	____	____
c. Mechanical heat indicator results -	____	____
2. Recorded breeding observations -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Breeding chalk Breeding records Chin-ball marker Patch heat detector Pocket record	

Duty: Breeding Beef	**Duty No.** A
	Task No. 10

Task: Breed cows and heifers, using appropriate achievement indicator techniques and equipment, to achieve fertilization.

Achievement Indicators: The learner:	Yes	No
1. Checked record book for freshening (calving) date -	____	____
2. Checked cow's physical condition -	____	____
3. Inseminated cow or heifer:		
a. Artificially:		
1. selected semen -	____	____
2. restrained animal -	____	____
3. thawed semen -	____	____
4. put plastic sleeve on -	____	____
5. cleaned vulva -	____	____
6. inseminated cow or heifer -	____	____
7. cleaned up equipment -	____	____
8. discarded waste materials -	____	____
b. Natural:		
1. separated bull -	____	____
2. had veterinarian check bull's semen and general health prior to each breeding season -	____	____
3. turned bull in with cow or heifer -	____	____
4. removed bull after 24 hours -	____	____
4. Recorded breeding data -	____	____

Duty: Breeding Beef	**Duty No.** A
	Task No. 11

Task: Arrange pregnancy check for bred cows and heifers, using appropriate techniques and records, to determine pregnant cows and heifers.

Achievement Indicators: The learner:	Yes	No
1. Checked breeding date -	____	____
2. Scheduled a vet to palpate cows at 42 to 45 days after breeding -	____	____
3. Recorded diagnosis -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Barn chart Breeding wheel Pocket record	

Duty: Breeding Beef -	**Duty No.** A
	Task No. 12

Task: Store semen, using appropriate methods, to preserve quality semen until used.

Achievement Indicators: The learner:	Yes	No
1. Placed nitrogen tank in safe area:		
a. Temperature and humidity -	____	____
b. Safe from collision abuse -	____	____
c. Safe from inadvertent tampering -	____	____
2. Maintained liquid nitrogen level in tank above canisters -	____	____
3. Replaced semen in canister and stored -	____	____
4. Recorded the addition or removal of all semen -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Canes Canisters Gloves Measuring stick Nitrogen tank Semen Semen record book	

Duty: Breeding Beef	**Duty No.** A
	Task No. 13

Task: Cull animals, using appropriate records, to maintain desirable heritable characteristics in herd.

Achievement Indicators: The learner:	Yes	No
1. Selected standards for culling:		
a. Milk reproduction -	____	____
b. Reproduction -	____	____
c. Pedigree -	____	____
d. Classification/type -	____	____
e. Poor disposition -	____	____
f. Sick or injured -	____	____
2. Culled according to chosen criteria -	____	____
3. Disposed of culled animals -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Breeding records Classification/type scores Health records Pedigree records Production records	

Duty: Caring for Beef	**Duty No.** B
	Task No. 1

Task: Plan livestock operation goals for the farm, using factors of production and records, to establish a desirable beef production unit.

Achievement Indicators: The learner:	Yes	No
1. Reviewed goals and alternatives -	____	____
2. Determined cash income need for:		
a. Family living -	____	____
b. Operating expenses -	____	____
c. Debt retirement -	____	____
d. Capital purchases -	____	____
3. Assessed available factors of production (land, labor, capital, management) -	____	____
4. Listed available factors of production -	____	____
5. Calculated cash and/or accrual income sources -	____	____
6. Assessed alternatives -	____	____
7. Selected and recorded suitable alternatives -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Paper Pencil Calculator Map of farm	

Duty: Caring for Beef	**Duty No.** B
	Task No. 2

Task: Make inventory list such as cattle, equipment, etc., using records, to establish a current inventory.

Achievement Indicators: The learner:	Yes	No
1. Prepared for physical count:		
a. Cleaned bins -	____	____
b. Checked contents of opened boxes -	____	____
c. Resealed open boxes -	____	____
d. Identified and tagged miscellaneous parts -	____	____
2. Prepared inventory sheet or form including blocks for the following:		
a. Equipment -	____	____
b. Parts -	____	____
c. Cattle -	____	____
d. Merchandise, etc. -	____	____
3. Listed all items in the appropriate block -	____	____
4. Conducted physical count -	____	____
5. Updated inventory cards -	____	____
6. Filed inventory -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Inventory Sheet	

Duty: Caring for Beef	**Duty No.** B
	Task No. 3

Task: Prepare production performance records, using appropriate resources, to establish system of performance indicators.

Achievement Indicators: The learner:	Yes	No
1. Reviewed farm goals -	____	____
2. Identified records needed (pounds of feed consumed, pounds of gain, feed efficiency index, individual production, total production) -	____	____
3. Revised and selected needed beef production data -	____	____
4. Selected method of recording data -	____	____
5. Recorded data for the beginning year -	____	____
6. Made data entries during the year as required by production schedule -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Record books Production data Farm goals Calculator	

Duty: Caring for Beef	**Duty No.** B
	Task No. 4

Task: Identify animals, using appropriate records, to maintain herd performance.

Achievement Indicators: The learner:	Yes	No
1. Studied identifying methods -	____	____
2. Selected system to use:		
a. Ear tags -	____	____
b. Freeze brand -	____	____
c. Hot brand -	____	____
d. Neck chains -	____	____
3. Obtained identifying equipment -	____	____
4. Identified animals -	____	____
5. Recorded numbers in farm records -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Ear tags Freeze brander Hot branding iron Neck chains Record sheets	

Duty: Caring for Beef	**Duty No.** B
	Task No. 5

Task: Assist animals in delivering young, using appropriate techniques, to deliver a healthy calf.

Achievement Indicators: The learner:	Yes	No
1. Checked and confirmed calving dates -	____	____
2. Observed for signs of calving:		
a. Physiological changes -	____	____
b. Individual behavior -	____	____
3. Provided a clean dry pen -	____	____
4. Observed calving process:		
a. Always with first calf heifers -	____	____
b. As needed with mature cows -	____	____
5. Determined position of calf -	____	____
6. Assisted if calf presented in an incorrect position -	____	____
7. Contacted veterinarian if complications occurred -	____	____
8. Cleaned mucus off nostril to make sure calf is breathing -	____	____
9. Clipped navel cord and disinfect with iodine -	____	____
10. Assisted newborn to nurse -	____	____

Duty: Caring for Beef	**Duty No.** B
	Task No. 6

Task: Remove afterbirth, using sanitary methods, to secure a healthy cow.

Achievement Indicators: The learner:	Yes	No
1. Observed cow six to eight hours after calving:		
Note: Observed for signs of retained placenta.		
a. Listlessness -	____	____
b. Portion of placenta extending from vagina -	____	____
c. Fever -	____	____
d. Absence of available milk in teats -	____	____
2. Exerted gentle pull on portion of placenta extending from vagina -	____	____
Caution: If placenta did not move after one gentle pull stopped exerting pressure).		
3. Administered medication to induce uterin muscle contraction and release of milk -	____	____
4. Examined cow for passage of afterbirth -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Medication Rubber gloves Thermometer Needle and syringe Veterinarian's recommendations	

Duty: Caring for Beef	**Duty No.** B
	Task No. 7

Task: Check mother's milk supply, using appropriate techniques, to obtain a healthy calf.

Achievement Indicators: The learner:	Yes	No
1. Checked udder for temperature and hardness -	____	____
2. Checked each teat for milk supply -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Freshen cow	

Duty: Caring for Beef	**Duty No.** B
	Task No. 8

Task: Wean calves using appropriate technique and equipment, to ensure a healthy calf.

Achievement Indicators: The learner:	Yes	No
1. Identified weight to wean calves -	____	____
2. Separated cow from calf -	____	____
3. Reduced feeding level to cow -	____	____
4. Provided complete feed ration and water for calf and cow -	____	____
5. Provided suitable environment for calf past weaning -	____	____
6. Observed calf for stress symptoms; e.g. scours, cough, etc. -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Feeder Waterers Medication Pens	

Duty: Caring for Beef	**Duty No.** B
	Task No. 9

Task: Record weaning weights of calves, using appropriate resources, to maintain records.

Achievement Indicators: The learner:	Yes	No
1. Recorded weights of calves -	____	____
2. Calculated adjusted weight -	____	____
3. Recorded adjusted weight of calves -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Record forms Calculator Calving data Weaning weight data	

Duty: Caring for Beef	**Duty No.** B
	Task No. 10

Task: Weigh animals, using appropriate equipment, to maintain records.

Achievement Indicators: The learner:	Yes	No
1. Identified animals to be weighed -	____	____
2. Moved animals to holding pens -	____	____
3. Prepared scales and checked for accuracy -	____	____
4. Weighed animals and recorded weight -	____	____
5. Returned animals to herd lot -	____	____

Caution: Made sure animals were returned to same lot from which they were removed.

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Scales Holding pens Record forms	

Duty: Caring for Beef	**Duty No.** B
	Task No. 11

Task: Move feeder animals to feedlot, using appropriate resources, to ensure healthy, uninjured animals in the feedlot.

Achievement Indicators: The learner:	Yes	No
1. Identified feeder animals to be moved -	____	____
2. Calculated number of feeder animals facilities will accommodate -	____	____
3. Identified best mode of transporting -	____	____
4. Selected ration to feed after moving -	____	____
5. Checked watering and feeding equipment -	____	____
6. Provided dry, warm, well-ventilated sleeping quarters -	____	____
7. Moved animals -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Loading chute Truck or other hauling equipment Feedlot Hurdles	

Duty: Caring for Beef	**Duty No.** B
	Task No. 12

Task: Fill out application for registration with purebred cattle association, using appropriate forms and records, to establish a purebred herd.

Achievement Indicators: The learner:	Yes	No
1. Reviewed application -	____	____
2. Assembled requested data for each animal to be registered -	____	____
3. Entered information on application -	____	____
4. Mailed application to appropriate purebred cattle association -	____	____
5. Filed registration papers when returned from association -	____	____

Criteria: Competence in the task will be recognized when the task is completed according to the requirements of the breed association.

Tools and Equipment:	**Resources:**
Application for appropriate purebred cattle association Data on cattle System established for naming cattle	

Duty: Caring for Beef	**Duty No.** B
	Task No. 13

Task: Dispose of unused chemicals and drugs using appropriate equipment, to ensure a healthy environment for the herd.

Achievement Indicators: The learner:	Yes	No
1. Read label carefully -	____	____
2. Reviewed local, state and federal hazardous waste regulations -	____	____
3. Determined class of content from label -	____	____
4. Determined disposal classification of container -	____	____
5. Identified alternative disposal procedures based on:		
a. Class of chemical -	____	____
b. Class of container -	____	____
6. Selected appropriate disposal procedure:		
a. Bury -	____	____
b. Incinerate -	____	____
c. Return to manufacturer for reuse -	____	____
7. Disposed of unused chemicals -	____	____

Criteria: Competence in this task will be recognized when the achievement indicators are performed in accordance with the state and local health regulations and in accordance with the product label.

Tools and Equipment:	**Resources:**
Incinerator State and federal hazardous waste management regulations	

Duty: Caring for Beef	**Duty No.** B
	Task No. 14

Task: Store chemicals, inflammable materials and medications, using appropriate resources and instructions, to ensure safe environment.

Achievement Indicators: The learner:	Yes	No
1. Read label for storage requirements -	____	____
2. Prepared the storage area:		
a. Installed a locking mechanism -	____	____
b. Provided recommended temperature, moisture and ventilation -	____	____
c. Installed required warning signs -	____	____
3. Separated items by class or category; e.g. dry chemicals, liquid chemicals, etc. -	____	____
4. Inspected containers for leaks or corrosion -	____	____
5. Attached complete labels to substitute containers -	____	____
6. Inventoried all items -	____	____
7. Placed item in designated areas -	____	____
8. Locked storage area -	____	____

Criteria: Competence in this task will be recognized when the achievement indicators are performed in accordance with the state and local regulations and in accordance with the product label.

Tools and Equipment:	**Resources:**
Metal cabinet Lock Blank labels Permanent markers	

Duty: Caring for Beef	**Duty No.** 8
	Task No. 15

Task: Care for animal's feet, using appropriate equipment, to maintain healthy animals.

Achievement Indicators: The learner:	Yes	No
1. Checked feet daily for:		
a. Overgrowth -	____	____
b. Infection -	____	____
(1) odor -	____	____
(2) tenderness -	____	____
c. Injuries -	____	____
2. Treated infections and injuries:		
a. Medication -	____	____
b. Bandaging -	____	____
c. Foot bath -	____	____
d. Consult with veterinarian as necessary -	____	____
3. Contracted with a professional hoof trimmer as needed -	____	____
4. Maintained clean, dry bedding -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Bandages Hammer Hoof chisel Hoof knife Hoof nippers Hoof rasp	

Duty: Feeding Beef	**Duty No.** C
	Task No. 1

Task: Balance ration and creep feed calves, using appropriate records and other resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutrient requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; calves; antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 2

Task: Balance and feed ration to beef bulls, using appropriate records and other resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; beef bull(s); antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 3

Task: Balance and feed ration to beef show animals, using appropriate records and other resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; beef show animal(s); antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 4

Task: Balance and feed ration to fattening cattle, using appropriate records and other resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; fattening cattle; antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 5

Task: Balance and feed ration to replacement heifers, using appropriate records and resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; replacement heifers; antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 6

Task: Balance and feed ration to weaned beef calves, using appropriate records and resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; weaned beef calves; antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 7

Task: Balance and feed ration to wintering brood cows and heifers, using appropriate records and resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; brood cow(s) and heifer(s); antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 8

Task: Balance and feed ration to gestating brood cows and heifers, using appropriate records and resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; gestating brood cow(s) and heifer(s); antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 9

Task: Balance and feed ration to lactating brood cows and heifer[illegible] using appropriate records and resources, to assure desired performance.

Achievement Indicators: The learner:	Yes	No
1. Noted size and type of animal -	____	____
2. Noted purpose for which animal was being fed (maintenance, growth, etc.) -	____	____
3. Determined nutritional requirements of animal for expected performance -	____	____
4. Analyzed nutrient content of available feed and supplement -	____	____
5. Formulated a balanced ration -	____	____
Note: Added antibiotics, if appropriate.		
6. Mixed ration -	____	____
7. Fed animal -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Nutritional requirements tables; feed composition tables; supplement (with tag); age; weight; stage of production; expected performance of animal; available feed; lactating brood cow(s) and heifer(s); antibiotics (if appropriate)	

Duty: Feeding Beef	**Duty No.** C
	Task No. 10

Task: Prepare beef feeding records, using appropriate resources and calculations, to provide desired records of proficiency.

Achievement Indicators: The learner:	Yes	No
1. Determined records to be kept:		
a. Total grain consumed -	____	____
b. Total commercial feed used -	____	____
c. Total roughage consumed -	____	____
d. Total pounds of beef produced -	____	____
e. Beginning and ending inventories -	____	____
2. Recorded entries either for total enterprise or by stage of life cycle -	____	____
3. Calculated amount and cost of feed fed per pound of beef produced -	____	____
Note: This can be done per animal or by enterprise.		

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Record forms Feed inventory records Beef feeding data	

Duty: Feeding Beef	**Duty No.** C
	Task No. 11

Task: Select feeding methods, using appropriate resources, to provide for maximum cost effectiveness and performance of animals with minimum feed wastage.

Achievement indicators: The learner:	Yes	No
1. Identified kinds of beef to be fed -	____	____
2. Calculated number of animals to be fed -	____	____
3. Identified kind of ration to be fed -	____	____
4. Evaluated availability and cost of equipment -	____	____
5. Identified applicable feeding systems -	____	____
6. Evaluated applicable feeding systems -	____	____
7. Selected feeding system -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Feeding publications Feeding equipment publications Calculator Financial records	

Duty: Feeding Beef	**Duty No.** C
	Task No. 12

Task: Calculate the cost of gain on feeder steer operation, using appropriate records and resources, to reflect total pounds of gain and all feed and non-feed costs.

Achievement Indicators: The learner:	Yes	No
1. Calculated pounds of total gain per steer or group of steers -	____	____
2. Adjusted total pounds of gain for death loss -	____	____
3. Calculated amount and value of total feed consumed per steer or group of steers -	____	____
4. Calculated all non-feed components per steer or group of steers including labor, utilities, housing, bedding, and equipment -	____	____
5. Added total cost of feed consumed and total non-feed cost -	____	____
6. Divided total cost by total pounds gained to obtain cost per pound of gain -	____	____
7. Recorded actual adjusted total pounds of gain -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Financial records Production records	

Duty: Feeding Beef	**Duty No.** C
	Task No. 13

Task: Calculate cost of rations and feed mixtures, using appropriate resources, to express values and quantities in dollars per hundred weight without error.

Achievement Indicators: The learner:	Yes	No
1. Listed feed ration ingredients or commercial feeds fed -	____	____
2. Calculated cost per pound of feed ingredients used or cost of a commercial complete mixed ration -	____	____
3. Multiplied pounds of each feed ingredient in ration by value of ingredient per CWT, or multiplied required pounds of commercial complete ration by cost per pound -	____	____
4. Summed the cost of all ingredients for total cost of ration -	____	____
5. Recorded and verified total cost of rations and feed mixtures -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Ration ingredient price list Quantity and weight conversion table List of feed ration ingredients	

Duty: Feeding Beef	**Duty No.** C
	Task No. 14

Task: Implant feeder steers with growth stimulant, using desirable equipment, supplies and techniques, to assure a properly implanted pellet.

Achievement Indicators: The learner:	Yes	No
1. Restrained animal -	____	____
2. Selected implant site - about 1" from the base of the ear -	____	____
3. Placed point of needle at implant site at approximately a 30° angle towards base of the ear -	____	____
4. Penetrated the skin the full length of the needle -	____	____
5. Withdrew needle slightly -	____	____
6. Expelled pellets of implant material into pocket created by needle penetration -	____	____
7. Withdrew needle slowly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Head gate of cattle chute with head catcher Implant gun Sterile needle Growth stimulant	

Duty: Feeding Beef	**Duty No.** C
	Task No. 15

Task: Determine feeding and watering space requirements, using appropriate resources, to maximize performance.

Achievement Indicators: The learner:	Yes	No
1. Calculated feeder space requirements for one animal -	____	____
2. Calculated watering space requirements for one animal -	____	____
3. Determined number of animals to be fed and watered -	____	____
4. Multiplied total number of animals by feeder space requirements for one animal -	____	____
5. Multiplied total number of animals by watering space requirements for one animal -	____	____
6. Recorded feeding and watering space requirements based on calculations -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
References Feeders Waterers Calculator	

Duty: Feeding Beef	**Duty No.** C
	Task No. 16

Task: Examine feedstuffs for mold and spoilage, using appropriate techniques and equipment, to identify hot areas, sprouted grains and off color.

Achievement Indicators: The learner:	Yes	No
1. Examined feedstuffs for off color, hot areas, or sprouted grains -	____	____
2. Inspected grain using a black light -	____	____
3. Measured the moisture content of feed or feed ingredients -	____	____
4. Removed molded, spoiled and contaminated feed and feed ingredients from storage areas -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Black light Moisture meter Feedstuffs Grain probe	

Duty: Feeding Beef	**Duty No.** C
	Task No. 17

Task: Precondition animals for shipping, using appropriate resources and techniques, to assure top performance of animals upon arrival at destination.

Achievement Indicators: The learner:	Yes	No
1. Selected animals to be shipped -	____	____
2. Separated animals -	____	____
3. Removed feed from animals 12 hours before shipping -	____	____
4. Provided source of water, if not going to direct slaughter -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Animals Sorting pens	

Duty: Feeding Beef	**Duty No.** C
	Task No. 18

Task: Service grinding and mixing equipment, using appropriate equipment, to assure full and effective operation.

Achievement Indicators: The learner:	Yes	No
1. Reviewed owner's service manual -	____	____
2. Observed grinding and mixing equipment in operation -	____	____
3. Removed all dirt and feed particles -	____	____
4. Inspected all moving and nonmoving parts -	____	____
5. Identified worn or broken parts that need replacing -	____	____
6. Obtained replacement parts -	____	____
7. Made repairs and adjustments -	____	____
8. Lubricated moving parts -	____	____
9. Insured grinding and mixing equipment was operating -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Adjustable wrenches Service manual Lubricant Repair parts Grease gun Broom or brush Shovel	

Duty: Feeding Beef	**Duty No.** C
	Task No. 19

Task: Service bulk feed handling equipment, using appropriate equipment, to assure full and effective operation.

Achievement Indicators: The learner:	Yes	No
1. Reviewed owner's service manual -	____	____
2. Observed bulk feed handling equipment in operation -	____	____
3. Removed all dirt and feed particles -	____	____
4. Inspected all moving and nonmoving parts -	____	____
5. Identified worn or broken parts that need replacing -	____	____
6. Obtained replacement parts -	____	____
7. Made repairs and adjustments -	____	____
8. Lubricated moving parts -	____	____
9. Insured equipment was operating -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Service manual Adjustable wrenches Lubricant Repair parts Grease gun Broom or brush Shovel	

Duty: Feeding Beef	**Duty No.** C
	Task No. 20

Task: Prepare ration for beef, using appropriate resources, to provide desired nutrients and antibiotics according to life stage of beef.

Achievement Indicators: The learner:	Yes	No
1. Identified life stage of animals to be fed	____	____
2. Identified possible feedstuffs -	____	____
3. Selected feedstuffs to be used -	____	____
Note: Selection should be based on the following factors:		
a. Life stage of animal -	____	____
b. Availability -	____	____
c. Cost -	____	____
d. Ease of feeding -	____	____
e. Nutritional value -	____	____
4. Calculated amount of ingredients required (balance the ration) -	____	____
5. Mixed ingredients -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Feed ingredients Feed publications Scales Mixing and grinding equipment	

Duty: Feeding Beef	**Duty No.** C
	Task No. 21

Task: Order feed, using appropriate resources, to assure continuous feed supply.

Achievement Indicators:	The learner:	Yes	No
	Contract Grower		
	1. Monitored feed supply at farm -	____	____
	2. Placed order for feed one or two working days prior to scheduled pickup, specifying type, quantity, and date needed -	____	____
	Independent Grower		
	1. Negotiated a feed supply contract with feed manufacturer or supplier -	____	____
	2. Monitored feed inventory level -	____	____
	3. Placed order for feed one or two working days prior to scheduled pickup -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Low feed inventory Phone Feed manufacturer or supplier	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 1

Task: Examine beef for external parasites, using appropriate resources, to determine suspect cattle.

Achievement Indicators: The learner:	Yes	No
1. Observed animal appearance, thriftiness and haircoat -	____	____
2. Isolated animals that showed symptoms of external parasite infestation -	____	____
3. Closely examined animal to identify parasitic organism -	____	____
4. Identified stage of organism's life cycle -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Reference (current recommendation for external parasite control) Isolation quarters Rubber gloves	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 2

Task: Apply insecticides in buildings, using appropriate equipment, to maintain herd health.

Achievement Indicators: The learner:	Yes	No
1. Removed animals from buildings -	____	____
Note: May not be required with some chemicals.		
2. Identified type of insecticide needed -	____	____
3. Calculated quantity of insecticide required -	____	____
4. Obtained insecticide -	____	____
Caution: Read carefully insecticide label before applying.		
5. Wore appropriate clothing -	____	____
6. Placed insecticide in applicator -	____	____
7. Applied insecticide to buildings -	____	____
Note: Read manufacturer's recommendations regarding length of time buildings should be left idle.		

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Measuring containers Insecticide applicator Insecticide Protective clothing	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 3

Task: Dust cattle, using appropriate resources, to maintain herd health.

Achievement Indicators: The learner:	Yes	No
1. Placed dust in burlap, self-applicating bags -	____	____
2. Suspended dust bags in area where all animals can treat themselves daily:		
a. Hung at level 4"-6" below top line of cattle's back -	____	____
b. Hung across lane or gateway between pastures, or -	____	____
c. Grouped in area where cattle frequent -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Insecticide dust Burlap dust bags (self-applicating) with water-proof cover on top	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 4

Task: Spray cattle, using appropriate resources, to maintain herd health.

Achievement Indicators: The learner:	Yes	No
1. Selected pesticide -	____	____
2. Read label before buying, before mixing, and before applying -	____	____
3. Selected application equipment -	____	____
4. Calibrated equipment -	____	____
5. Mixed ingredients -	____	____
6. Sprayed cattle -	____	____
7. Selected safe place for cleaning and flushing equipment -	____	____
8. Cleaned and flushed equipment -	____	____
9. Stored equipment and pesticide in a safe place -	____	____
10. Wore protective clothing -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Protective clothing Protective goggles Application equipment Pesticide	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 5

Task: Examine beef for internal parasites, using visual appraisal, to determine suspect cattle.

Achievement Indicators: The learner:	Yes	No
1. Observed appearance, thriftiness and haircoat -	____	____
2. Considered age of animals to see if they were large enough -	____	____
3. Collected manure sample for laboratory test -	____	____
4. Studied laboratory test report -	____	____
5. Identified animals with internal parasites -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Specimen containers Shovel Identification labels	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 6

Task: Deworm with paste/bolus, using appropriate methods, to ensure herd health.

Achievement Indicators: The learner:	Yes	No
1. Prepared balling gun and bolus/capsule or paste dispenser and paste -	____	____
2. Restrained animal -	____	____
3. Opened animal's mouth -	____	____
4. Inserted balling gun (dose syringe) to back of animals' mouth -	____	____
5. Ejected bolus/capsule/paste -	____	____
6. Withdrew balling gun/dose syringe or paste dispenser -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Headgate Balling gun/dose syringe or paste dispenser Bolus, capsule or paste	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 7

Task: Drench cattle, using appropriate resources, to maintain herd health.

Achievement Indicators: The learner:	Yes	No
1. Prepared materials -	____	____
2. Restrained animal -	____	____
3. Elevated animal's nose until it formed a straight line with the neck -	____	____
4. Inserted rubber tubing to back of animal's mouth -	____	____
5. Poured liquid medication/nutrients into tubing or ejected from dose syringe -	____	____
Caution: Do not pour more than 2 oz. at a time.		
6. Allowed animal to swallow liquid and breathe before administering additional liquid -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Headgate Rubber tubing Liquid medication or nutrients Dose syringe	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 8

Task: Treat cattle for internal parasites, using appropriate resources, to maintain herd health.

Achievement Indicators: The learner:	Yes	No
1. Observed cattle for weight loss, weakness, coughing, etc. -	____	____
2. Obtained fecal sample -	____	____
3. Sent sample to veterinarian for analysis -	____	____
4. Administered medication as prescribed by veterinarian -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Specimen container Veterinary recommendations	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 9

Task: Plan a general health program, using appropriate resources, to ensure a healthy beef herd.

Achievement Indicators:	The learner:	Yes	No
1.	Planned general health program for beef operation. The plan should include consideration of the following areas:		
	a. Physical plant design and layout -	____	____
	b. Building and equipment sanitation practices -	____	____
	c. Modes of transmission for disease organisms -	____	____
	d. Handling -	____	____
	e. Handling of newly purchased animals -	____	____
2.	Identified diseases common to geographic area -	____	____
3.	Categorized diseases according to life stage with which they are associated:		
	a. Breeding animals -	____	____
	b. Calving to weaning -	____	____
	c. Weaning to market -	____	____
	d. Feeder animals -	____	____
4.	Identified recommended treatments for common diseases -	____	____
5.	Planned specific treatment schedules according to life stage -	____	____
6.	Planned a disease control program -	____	____

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 10

Task: Take temperature of sick animal, using appropriate resources, to determine whether medication is required.

Achievement Indicators: The learner:	Yes	No
1. Shook down rectal thermometer to below normal temperature range of animal -	____	____
2. Lubricated thermometer -	____	____
3. Inserted thermometer one to two inches into rectum -	____	____
4. Left thermometer in place for three minutes -	____	____
5. Removed thermometer -	____	____
6. Wiped clean with soft clean cloth -	____	____
7. Read thermometer at eye level -	____	____
8. Recorded temperature to insure accurate records -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Rectal thermometer Clean cloth Pencil/paper	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 11

Task: Administer medication by injection, using appropriate resources, to ensure proper dosage and administration.

Achievement Indicators: The learner:	Yes	No
1. Selected large muscle mass (example: side of neck or hindquarter) -	____	____
2. Cleaned hair of dirt/debris -	____	____
3. Slapped injection site with the hand -	____	____
4. Inserted needle -	____	____
5. Injected medication -	____	____
6. Withdrew needle and syringe -	____	____
7. Applied pressure with thumb or finger to injection site to prevent medication from coming back through skin -	____	____
	____	____
	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Antiseptic Cotton balls Needle Syringe Medication	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 12

Task: Administer medication to animals orally, using appropriate resources, to insure successful administration without harming the animal.

Achievement Indicators: The learner:	Yes	No
1. Straddled calf's neck and backed calf into corner of pen -	____	____
2. Grasped the upper portion of the calf's mouth and raised head -	____	____
3. Inserted balling gun into back of mouth -	____	____
4. Squeezed balling gun handle so that bolus was deposited into back of mouth -	____	____
5. Administered liquid using plastic squeeze bottle -	____	____
6. Regulated liquid flow to assure animal does not choke -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calf Medication Shortening Balling gun Plastic squeeze bottle	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 13

Task: Applied medication to cuts and bruises, using appropriate resources, to ensure quick healing and less infection.

Achievement Indicators: The learner:	Yes	No
1. Controlled bleeding -	____	____
2. Clipped all the hair away from the wound -	____	____
3. Cleaned wound using soap and water -	____	____
4. Dried using sterile, dry cotton (Note: apply hydrogen peroxide for deeper cuts) -	____	____
5. Applied antibiotic ointment -	____	____
6. Applied insect repellent -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Scissors Soap Water Sterile dry cotton Medication Fly repellent	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 14

Task: Treat cattle for contagious diseases, using appropriate resources, to ensure herd health by limiting contamination.

Achievement Indicators: The learner:	Yes	No
1. Observed animal's appearance, thriftiness and temperament -	____	____
2. Isolated animals suspected of having a contagious disease -	____	____
3. Contacted veterinarian for diagnostic assistance -	____	____
4. Collected blood sample for analysis -	____	____
5. Identified disease to be treated -	____	____
6. Obtained correct medication in accordance with veterinarian's recommendation -	____	____
7. Administered medication in accordance with manufacturer's specification and veterinarian's recommendations -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Isolation facility Specimen container Veterinary recommendations	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 15

Task: Treat calves for scours, using appropriate resources, to obtain a healthy calf.

Achievement Indicators: The learner:	Yes	No
1. Segregated animal -	____	____
2. Discontinued or limited feed -	____	____
3. Gave fluids orally and/or by injection to combat dehydration -	____	____
4. Administered gastrointestinal protectants -	____	____
5. Gave prescribed antibiotics orally and/or by injection. (Caution: Choice of antibiotics should be determined by a veterinarian) -	____	____
6. Cleaned and disinfected premise and feed containers -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Electrolyte fluid Rubber tube Antibiotic	

Duty: Maintained Beef Health	**Duty No.** D
	Task No. 16

Task: Vaccinate calves for black leg, using appropriate resources, to ensure healthy calves.

Achievement Indicators: The learner:	Yes	No
1. Selected calves one to four months of age -	____	____
2. Administered vaccine (Note: Calves vaccinated at less than four months should be revaccinated at five to six months) -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Vaccine Syringe Needle	

Duty: Maintain Beef Health	**Duty No.** D
	Task No. 17

Task: Vaccinate calves for leptospirosis and anaplasmosis, using appropriate resources and recommendations, to ensure herd health.

Achievement Indicators: The learner:	Yes	No
1. Selected calves over two weeks of age -	____	____
2. Vaccinated selected calves in accordance with veterinary recommendations (Note: Vaccinate newly purchased animals at once, then isolate for three weeks) -	____	____
3. Repeated vaccination at six months of age -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Needle Syringe Vaccine	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 18

Task: Vaccinate heifers for Brucellosis (Bang's Disease), using appropriate resources and regulations, to ensure herd health.

Achievement Indicators: The learner:	Yes	No
1. Selected heifer(s) between 2-8 months of age -	____	____
2. Read vaccine label carefully -	____	____
3. Prepared vaccine -	____	____
4. Selected injection site -	____	____
5. Prepared injection site -	____	____
6. Inserted needle at 45° angle -	____	____
7. Injected vaccine -	____	____
8. Withdrew needle -	____	____
9. Massaged injection area to promote absorption -	____	____
10. Recorded medication on chart -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Vaccine Antiseptic Syringe Needle Heifer(s) Animal's health record	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 19

Task: Clip naval, using appropriate techniques, to maintain sanitary conditions.

Achievement Indicators: The learner:	Yes	No
1. Obtained scissors, string and tincture of iodine -	____	____
2. Separated calf from cow -	____	____
3. Tied naval cord -	____	____
4. Clipped naval cord -	____	____
5. Treated naval cord with tincture of iodine -	____	____
6. Returned calf to cow -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
String Scissors Tincture of iodine	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 20

Task: Castrate animals with elastrator, using appropriate methods, to ensure both testes are pressed through the elastrator rings at the lower end of the scrotum.

Achievement Indicators: The learner:	Yes	No
1. Held calf in sitting or lying position -	____	____
2. Expanded the rubber ring -	____	____
3. Pressed both testicles through the ring and to the lower end of the scrotum -	____	____
4. Released the rubber ring -	____	____
5. Removed the elastrator -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Elastrator New elastrator rings	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 21

Task: Castrate animals with knife, using appropriate method, to ensure complete removal of testicles and membrane covering.

Achievement Indicators: The learner:	Yes	No
1. Restrained the calf -	____	____
2. Pulled down one testicle at a time so that skin of scrotum is right over the testicle -	____	____
3. Made incision on the outside of the scrotum -	____	____
4. Repeated steps 2-4 for other testicle -	____	____
5. Alternated method:		
a. Removed lower 1/3 of scrotum b. Pulled out both testicles -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Knife Scalpel Newberry Castrator Antiseptic Insect repellant Rope or cattle chute	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 22

Task: Dehorn animals, using appropriate resources, to ensure the horns are removed and hemorrhaging is controlled; to assure safety of handlers and other animals.

Achievement Indicators: The learner:	Yes	No
1. Selected method of dehorning based on horn size and season:		
a. Caustic paste -	____	____
b. Electric dehorner -	____	____
c. Scoop and gouge dehorner -	____	____
d. Guillotine dehorner -	____	____
2. Removed horn -	____	____
3. Controlled bleeding:		
a. Blood clotting substance -	____	____
b. Pressure points -	____	____
4. Medicated wound -	____	____
5. Checked animals periodically for proper healing -	____	____
6. Consulted veterinarian if necessary -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Electric dehorner; forceps guillotine dehorner; gouge dehorner; restraining chute; rubber gloves; scoop dehorner; tube dehorner; insect repellent; antiseptic	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 23

Task: Treat bloated animals, using appropriate resources, to correct rumenal size.

Achievement Indicators:

The learner:	Yes	No
1. Determined the critical status of the bloated animal:		
a. Size of midsection extension b. Exhibited discomfort -	____	____
2. Administered aid:		
a. Standing and moving animal (1) positioned speculum (2) passed stomach tube (3) poured in anti-foam agent (4) allowed release of gas b. Prostrate and unable to rise (1) inserted trocar (2) adjusted cannula for release of gas -	____	____
3. Regulated access to legumes and/or bloat preventing agent -	____	____
4. Recorded on individual health sheet -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Frick speculum tube
Oral drench syringe
Stomach tube
Trocar with cannula

Resources:

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 24

Task: Implant magnets, using appropriate methods, to ensure swallowing and placement.

Achievement Indicators: The learner:	Yes	No
1. Determined specific animal need for magnets -	____	____
2. Restrained animal -	____	____
3. Placed in esophagus -	____	____
4. Checked for swallowing -	____	____
5. Recorded on individual health sheet -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Balling (Bolus) gun Magnets	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 25

Task: Isolate newly purchased animals, using appropriate resources and methods, to ensure herd health.

Achievement Indicators: The learner:	Yes	No
1. Processed immediately upon arrival -	____	____
2. Provided clean, dry, comfortable quarters -	____	____
3. Provided clean fresh water -	____	____
4. Provided a palatable ration -	____	____
5. Provided minerals -	____	____
6. Observed, isolated and treated sick and non-compatible animals -	____	____
7. Rechecked heifers and cows for bang's disease after sixty days -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Pens/pasture Clean water Ration Minerals Newly purchased cattle	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 26

Task: Separate sick, weak or injured animals, using appropriate equipment and resources, to maintain herd health.

Achievement Indicators: The learner:	Yes	No
1. Identified sick, weak or injured animals -	____	____
2. Determined extent of sick, weak or injured condition -	____	____
3. Moved animals away from other animals (Note: The physical condition of the animal may require the use of a tractor and carriage) -	____	____
4. Provided quarters for animals taking into consideration:		
a. Temperature of quarters		
b. Water supply		
c. Feed supply		
d. Bedding		
e. Ventilation -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Tractor Tractor carriage Rope	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 27

Task: Treat cattle for foot rot, using appropriate resources and recommendations, to ensure clean and dry feet

Achievement indicators: The learner:	Yes	No
1. Placed animal in clean, dry place -	____	____
2. Removed foreign materials from affected area -	____	____
3. Trimmed away the affected part of the foot -	____	____
4. Soaked affected foot for 20 minutes daily in antiseptic solution (Caution: Consult veterinarian for sulfonamide or antibiotic therapy) -	____	____
5. Dried foot -	____	____
6. Kept affected area clean -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Pails Scissors Antiseptic solution Broad spectrum antibiotic Vitamin A	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 28

Task: Treat cattle for maggots, using appropriate resources and methods, to correct and maintain animal health.

Achievement Indicators: The learner:	Yes	No
1. Restrained animal if necessary -	____	____
2. Clipped hair from around wound -	____	____
3. Burned clipped hair -	____	____
4. Removed dead maggots with tweezers or forceps -	____	____
5. Applied medication for larvae burrowed deeply -	____	____
6. Applied antibiotic to promote healing -	____	____
7. Sprayed area with fly repellent -	____	____
8. Cleaned equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Scissors Medication (Chloroform, Benzine, Smear 62, or EQ335) Tweezers Forceps Pine tar Fly repellent	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 29

Task: Treat cattle for pink eye, using appropriate resources and recommendations, to correct animal vision.

Achievement Indicators: The learner:	Yes	No
CAUTION: Consulted veterinarian for appropriate medication.		
METHOD 1:		
1. Restrained animal -	____	____
2. Cleaned crusts, dirt and loose hair from around affected eye -	____	____
3. Washed eye with eyewash -	____	____
4. Applied antibacterial opthalmic medication -	____	____
5. Confined animal(s) in dark shelter -	____	____
6. Repeated treatment several times daily -	____	____
CAUTION: Obtain veterinary assistance.		
ALTERNATE METHOD:		
1. Restrained animal -	____	____
2. Cleaned crusts, dirt and loose hair from around affected eye -	____	____
3. Removed long hair from around the eye with clipper -	____	____
4. Applied antibacterial opthalmic medication -	____	____
5. Circled the eye with a bead of back-tag cement. Note: Make circle about 4" in diameter -	____	____
6. Applied burlap patch to cover cemented area -	____	____
7. Trimmed edges -	____	____
8. Repeated at 3-5 day intervals -	____	____

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 30

Task: Treat cattle for pneumonia, using appropriate resources and recommendations, to correct and ensure animal health.

Achievement Indicators: The learner:	Yes	No
1. Restrained animal -	____	____
2. Took temperature -	____	____
3. Called veterinarian -	____	____
4. Administered prescribed antibiotic -	____	____
5. Provided clean, dry, hygenic environment -	____	____
6. Provided easily digested food in small quantities -	____	____
7. Provided clean, fresh water at all times -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Thermometer Antibiotic Syringe Needle Clean, dry quarters	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 31

Task: Treat cattle for shipping fever, using appropriate resources and recommendations, to ensure animal health.

Achievement Indicators: The learner:	Yes	No
1. Isolated newly acquired animals from other animals -	____	____
2. Observed for symptoms of shipping fever -	____	____
3. Restrained animal, if necessary -	____	____
4. Took temperature -	____	____
5. Consulted temperature -	____	____
6. Administered prescribed medication -	____	____
7. Kept animals isolated until symptoms were no longer evident -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Facilities to isolate animals Thermometer Syringe Needle Balling gun Antibiotics	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 32

Task: Treat cows for mastitis, using appropriate resources and recommendations, to correct cow's milk.

Achievement Indicators: The learner:	Yes	No
Caution: Consult veterinarian.		
1. Culled suspected animal from herd -	____	____
2. Restrained animal, if necessary -	____	____
3. Administered California Mastitis Test -	____	____
4. Took temperature -	____	____
5. Collected milk sample -	____	____
6. Sent milk sample to laboratory for culture and sensitivity tests -	____	____
7. Consulted veterinarian -	____	____
8. Administered prescribed medication and treatment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
California Mastitis Test Thermometer Infra-red lamp Container for milk sample Needle Syringe	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 33

Task: Dispose of dead animals, using appropriate resources, to avoid contamination of water or feed supply and prevent access to carcass by livestock or predators.

Achievement Indicators: The learner:	Yes	No
1. Removed dead animals from building or pasture -	____	____
2. Buried animals or place in incinerator -	____	____
Note: Area where dead animal was lying must be disinfected regardless of disposed procedure selected.		
OR		
3. Called dead animal disposal service -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Shovel Incinerator Rope or chain Wagon Tractor or truck Quicklime	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 34

Task: Disinfect building and equipment, using appropriate resources, to ensure a sanitary environment.

Achievement Indicators: The learner:	Yes	No
1. Removed all animals from building -	____	____
2. Cleaned buildings and equipment -	____	____
3. Selected the disinfectant -	____	____
4. Calculated quantity of disinfectant needed -	____	____
5. Washed disinfectant applicator -	____	____
Note: A new applicator may require rinsing with clean water.		
6. Mixed disinfectant solution according to manufacturer's specifications -	____	____
7. Filled applicator with disinfectant solution -	____	____
8. Applied disinfectant solution to buildings and equipment -	____	____
9. Cleaned and stored equipment -	____	____
Note: Allowed buildings to remain idle three days to three weeks before using again.		

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Bucket Measuring container Disinfectant applicator (sprinkling can or pressure sprayer) Rubber gloves Rubber boots Protective glasses	

Duty: Maintaining Beef Health	**Duty No.** D
	Task No. 35

Task: Clean housing, using appropriate resources, to ensure a sanitary environment.

Achievement Indicators: The learner:	Yes	No
1. Swept, dusted and removed cob webs -	____	____
2. Removed foreign materials (soil, manure, straw, etc.) -	____	____
3. Washed and scrubbed all surfaces -	____	____
4. Allowed building to dry -	____	____
5. Disinfected with disinfectant -	____	____

Caution: Followed manufacturer's recommendation. Wore protective clothing.

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Scraper; broom; shovel; wheelbarrow; water; bucket; rubber gloves; rubber boots; goggles; disinfectant; hose; pressure washer	

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 1

Task: Plan for housing for cow and calf herds and cattle feed lot, using appropriate resources, to assure desirable housing unit.

Achievement Indicators: The learner:	Yes	No
1. Determined number of animals to be housed -	____	____
2. Determined housing size -	____	____
3. Determined ventilation rate -	____	____
4. Determined feeding and watering facilities -	____	____
5. Determined waste disposal needs -	____	____
6. Determined feed storage needs and facilities -	____	____
7. Developed floor plan -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Drawing board References: Housing needs Ventilation Feed/water requirements Waste requirements	

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 2

Task: Clean and adjust waterers for beef, using appropriate tools and equipment, to maintain desirable water level.

Achievement Indicators: The learner:	Yes	No
1. Observed water level -	____	____
2. Removed top cover and set float -	____	____
3. Removed drain plug -	____	____
4. Brushed inside clean as water and foreign particles drain out -	____	____
5. Replaced drain plug -	____	____
6. Refilled with water -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Hand tools Long handle brush Owner's service manual	

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 3

Task: Construct feed trough, using appropriate tools and equipment, to prevent cattle or calves from throwing feed out.

Achievement Indicators: The learner:	Yes	No
1. Determined feeding requirements -	____	____
2. Reviewed plans -	____	____
3. Selected materials -	____	____
4. Constructed trough -	____	____
5. Installed trough -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Plans for feed trough
Lumber
Saws
Hammer
Nails

Resources:

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 4

Task: Construct creep feeder, using appropriate tools and equipment, to permit calves to feed while excluding cows.

Achievement Indicators: The learner:	Yes	No
1. Determined type of creep feeder -	____	____
2. Obtained materials -	____	____
3. Constructed feeder according to plans -	____	____
4. Constructed creeps -	____	____
5. Installed feeder -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Plans for creep feeder
Lumber
Hammer
Saw
Nails
Ruler

Resources:

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 5

Task: Construct loading chute, using appropriate tools and equipment, to accommodate cattle and prevent slipping.

Achievement Indicators: The learner:	Yes	No
1. Determined type of chute -	____	____
2. Constructed frame for floor -	____	____
3. Constructed floor -	____	____
4. Constructed and braced sides -	____	____
5. Mounted on axles if a portable chute -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Plans; wheels; axle; mounts; 2 x 4's or 2 x 6's; plywood or boards for floor and walls; hammer; nails; saws	

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 6

Task: Build trim chute, using appropriate tools and equipment, to assure that each animal is held securely.

Achievement Indicators: The learner:	Yes	No
1. Determined design of chute -	____	____
2. Obtained materials needed -	____	____
3. Built chute -	____	____
4. Put animal in chute to check for:		
a. Strength -	____	____
b. Safety to animal -	____	____
c. Safety to handler -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Chute plans; wood/metal; hammer; nails; saw; safety glasses; welder; bolts	

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 7

Task: Construct back-scratcher for insecticide application, using appropriate tools and equipment, to apply desirable amount of insecticide.

Achievement Indicators: The learner:	Yes	No
1. Positioned post at end of feed pen -	____	____
2. Attached beam (2 x 4 or 2 x 6) to post so that it is:		
a. Horizontal -	____	____
b. Parallel to feeding pen -	____	____
c. At height of cattle -	____	____
3. Wrapped with burlap sacks or cloth -	____	____
4. Saturated sacks or cloth with insecticide -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:
Wood post
Wood beam (2 x 4 or 2 x 6)
Saw
Hammer
Nails
Burlap bags or cloth
Insecticide
Set of plans

Resources:

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 8

Task: Plan waste disposal system, using appropriate resources, to assure an efficient, cost-effective system that meets local/state/federal pollution standards.

Achievement Indicators: The learner:	Yes	No
1. Consulted local, state and federal environmental regulations -	____	____
2. Consulted with local Agricultural Stabilization Conservation Service and/or Soil Conservation Service -	____	____
3. Considered geographic location -	____	____
4. Determined size of system needed -	____	____
5. Determined the location of physical unit -	____	____
6. Determined what type of waste disposal system was the most practical -	____	____
7. Determined how the facility should be equipped -	____	____
8. Determined future expansion plans -	____	____
9. Submitted plan for approval to proper local and state agencies -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Facility blueprints Local, state, and federal ordinances Soil Conservation Plan	

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 9

Task: Remove wastes, using appropriate resources, to maintain a clean beef yard within local/state/federal pollution standards.

Achievement Indicators: The learner:	Yes	No
1. Transferred waste to field delivery system:		
a. By hand with a pitchfork and/or shovel -	____	____
b. Mechanical barn cleaner -	____	____
2. Transferred waste to storage with periodic removal to fields:		
a. Lagoon -	____	____
b. Slurry tank -	____	____
3. Replaced all safety gates, lids, covers, etc. -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Alley scrapers
Gutter cleaners
Manure stacker
Pitch fork
Shovel
Skid loader
Tractor with rear mounted blade
Transfer pump

Resources:

Duty: Maintaining Beef Facilities	**Duty No.** E
	Task No. 10

Task: Apply wastes to fields, using appropriate equipment, to assure an efficient, cost-effective and pollution-free method.

Achievement Indicators: The learner:	Yes	No
1. Applied liquid manure:		
a. Tank spreader -	____	____
b. Irrigation system -	____	____
2. Applied semi-solid manure:		
a. Tank spreader -	____	____
b. Irrigation system -	____	____
c. Semi-solid manure spreader -	____	____
3. Apply solid manure -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:
Agitation device; conventional box-type spreader; front-end loader; irrigation and pumping equipment; liquid manure injectors; liquid manure pumps; liquid manure spreader; semi-solid manure spreaders; tractor

Resources:

Duty: Marketing Beef	**Duty No.** F
	Task No. 1

Task: Consign outstanding animals to sale, using appropriate records and contract, to maintain identity of cattle.

Achievement Indicators: The learner:	Yes	No
1. Determined the show and/or sale the animal is consigned to -	____	____
2. Publicized animal in breed magazine -	____	____
3. Made out entry form on time -	____	____
4. Prepared animal as for show purpose -	____	____
5. Displayed animal at sale -	____	____
6. Had neat attractive pen for animal at sale -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed and the animal has been consigned for sale.

Tools and Equipment:	**Resources:**
Breed magazine Entry forms Sale rules	

Duty: Marketing Beef	**Duty No.** F
	Task No. 2

Task: Plan marketing schedule, using marketing goals, objectives and resources, to ensure the best feasible return to the farm enterprise.

Achievement Indicators: The learner:	Yes	No
1. Reviewed marketing goals and objectives -	____	____
2. Identified marketing alternatives -	____	____
3. Evaluated livestock market news -	____	____
4. Evaluated seasonal and cyclical market variations -	____	____
5. Evaluated grade market variations -	____	____
6. Evaluated hedging and forward contracts -	____	____
7. Assessed number of livestock to be marketed -	____	____
8. Calculated production costs -	____	____
9. Calculated market service and commission costs -	____	____
10. Calculated shrinkage factors -	____	____
11. Calculated transportation costs -	____	____
12. Calculated breakeven point -	____	____
13. Selected most profitable marketing strategy -	____	____
14. Developed marketing plan -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Marketing goals/objectives; livestock marketing publications; current market quotations; livestock costs and budgets; calculator; telephone; radio/tv	

Duty: Marketing Beef	**Duty No.** F
	Task No. 3

Task: Calculate expected returns and profits on sales, using appropriate records, to determine total expenditures and net returns.

Achievement Indicators: The learner:	Yes	No
1. Itemized and summed cash production expenditures including cost of purchased animals and value of home grown grains and roughages -	____	____
2. Itemized and summed noncash production expenditures including depreciation and unpaid labor -	____	____
3. Itemized and summed sources of cash income -	____	____
4. Adjusted cash income and cash production expenses to account for changes in inventory values of animals and production inputs -	____	____
5. Subtracted adjusted cash production inputs from adjusted cash income to obtain net cash returns -	____	____
6. Subtracted noncash production expenses from net cash returns to obtain net returns -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Calculator Financial records Production records Marketing records	

Duty: Marketing Beef	**Duty No.** F
	Task No. 4

Task: Calculate shrinkage, using appropriate resources, to assure minimum weight loss.

Achievement Indicators:	The learner:	Yes	No
1.	Obtained weight of animals at the feed lot -	____	____
2.	Obtained weight of animals at market scales -	____	____
3.	Calculated shrinkage -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Scales Animals weights Calculator	

Duty: Marketing Beef	**Duty No.** F
	Task No. 5

Task: Estimate market grades, using appropriate resources, to determine market value.

Achievement Indicators: The learner:	Yes	No
1. Studied characteristics of each grade -	____	____
2. Learned parts of steer's body -	____	____
3. Segregated animals to be graded -	____	____
4. Observed animal's characteristics -	____	____
5. Marked animal -	____	____
6. Recorded estimated grade on grading card -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
USDA standard grade chart Compensation chart Colored marker Holding pens	

Duty: Marketing Beef	**Duty No.** F
	Task No. 6

Task: Select markets, using appropriate resources, to ensure the highest return when compared to alternative markets.

Achievement Indicators: The learner:	Yes	No
1. Reviewed market reports from different markets -	____	____
2. Compared market reports for price -	____	____
3. Calculated transportation cost, including animal shrinkage for shipping to alternate markets -	____	____
4. Calculated net price, considering marketing and transportation charges -	____	____
5. Identified markets offering most advantages -	____	____
6. Visited with market personnel -	____	____
7. Verified reliability of markets regarding prompt and correct payment for livestock -	____	____
8. Selected markets -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Daily market reports Calculator Market schedule	

Duty: Marketing Beef	**Duty No.** F
	Task No. 7

Task: Sort and mark steers for market, using appropriate resources, to assure animals are separated in designated weight categories.

Achievement Indicators: The learner:	Yes	No
1. Designated the desired market weight -	____	____
2. Weighed various size animals to use as reference -	____	____
3. Selected animals according to desired weights -	____	____
4. Marked animals ready for market -	____	____
5. Separated selected animals from herd -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Holding pens
Livestock marking pencil
Scales

Resources:

Duty: Marketing Beef	**Duty No.** F
	Task No. 8

Task: Cull animals for sale, using appropriate resources, to assure animals are ready for market.

Achievement Indicators:	The learner:	Yes	No
1.	Planned marketing date -	____	____
2.	Corralled cattle -	____	____
3.	Sorted animals according to age, condition, and background -	____	____
4.	Assured that the cattle were:		
	a. Castrated -	____	____
	b. Dehorned -	____	____
	c. Vaccinated -	____	____
	d. Free of certain drugs -	____	____
5.	Arranged transportation -	____	____
6.	Preconditioned cattle for stress and shipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Pens/pastures Marketing schedule	

Duty: Marketing Beef	**Duty No.** F
	Task No. 9

Task: Prepare carriers for hauling animals, using appropriate resources, to provide animals with clean and safe transportation.

Achievement Indicators: The learner:	Yes	No
1. Removed old bedding and foreign materials from the truck -	____	____
2. Inspected walls, floors, gates, latches and mechanical parts -	____	____
3. Made repairs -	____	____
4. Prepared clean bedding -	____	____
5. Provided ventilation -	____	____
6. Recorded date and type of repairs made -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Bedding material
Hammer
Nails
Bolts
Wrenches
Lumber
Operator's owner manual

Resources:

Duty: Marketing Beef	**Duty No.** F
	Task No. 10

Task: Load animals, using appropriate resources, to ensure the number and safety of cattle loaded.

Achievement Indicators: The learner:	Yes	No
1. Separated cattle to be marketed -	____	____
2. Fed and watered cattle lightly -	____	____
3. Avoided exciting animals -	____	____
4. Determined average weight of cattle -	____	____
5. Determined length of truck floor -	____	____
6. Determined number of cattle that could be loaded safely -	____	____
7. Bedded truck -	____	____
8. Checked loading chute for hazards -	____	____
9. Loaded cattle slowly -	____	____
10. Protected cattle from sun or cold -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Truck Feed Water Loading chute Bedding for truck	

Duty: Showing Beef	**Duty No.** G
	Task No. 1

Task: Select animals for showing, using appropriate resources, to have the highest quality animal in both type and pedigree.

Achievement Indicators: The learner:	Yes	No
1. Determined the date the animal will be shown -	____	____
2. Determined the approximate desired weight/age of animal for show day -	____	____
3. Purchased animal early enough to be finished or at proper age on show day -	____	____
4. Purchased animal from a reputable farmer -	____	____
5. Identified the parts of beef and know what to look for in a show animal -	____	____
6. Selected an animal that when finished will look as nearly like the ideal as possible -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Show schedule Show calves Beef judging book	

Duty: Showing Beef	**Duty No.** G
	Task No. 2

Task: Select equipment for fitting and showing, using appropriate resources, to assure that the animal can be prepared and presented well.

Achievement Indicators: The learner:	Yes	No
1. Made list of need equipment -	____	____
2. Built and/or purchased equipment -	____	____
3. Learned proper use -	____	____
4. Purchased quality show halter -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Supply catalogue Show bulletin	

Duty: Showing Beef	**Duty No.** G
	Task No. 3

Task: Train animal for showing, using appropriate resources, to assure that the animal is well behaved and presented to their best advantage.

Achievement Indicators: The learner:	Yes	No
1. Familiarized the animal with a show halter -	____	____
2. Familiarized the animal with a show stick -	____	____
3. Trained the animal to lead around show ring -	____	____
4. Trained the animal to set up correctly with use of show stick -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Halter Show stick Show area	

Duty: Showing Beef	**Duty No.** G
	Task No. 4

Task: Transport animals to show, using appropriate resources, to assure safety and health of animals at destination.

Achievement Indicators: The learner:	Yes	No
1. Knew the deadline for accepting the animal at the fair -	____	____
2. Transported animal in the coolness of the evening or morning if in hot weather -	____	____
3. Removed feed before loading -	____	____
4. Used a proper loading ramp -	____	____
5. Loaded slowly -	____	____
6. Bedded truck or trailer properly -	____	____
7. Used a good rack to keep animal in truck/trailer -	____	____
8. Drove carefully to show -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Truck/trailer Loading ramp	

Duty: Showing Beef	**Duty No.** G
	Task No. 5

Task: Groom beef for show, using appropriate resources, to present animal to its best advantage.

Achievement Indicators: The learner:	Yes	No
1. Trimmed hoofs of animal 3-4 weeks before the show -	____	____
2. Trimmed hair of animal 2 weeks before the show -	____	____
3. Washed animal before going to show -	____	____
4. Washed animal morning of show -	____	____
5. Applied hair dressing before show -	____	____
6. Polished hoofs -	____	____
7. Dressed tail -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Soap Hoof trimmers Clippers Combs Hair dresser	

Duty: Showing Beef	**Duty No.** G
	Task No. 6

Task: Prepare facilities (pen, stall, etc.) at show, using appropriate resources, to assure that animal will remain clean and healthy.

Achievement Indicators: The learner:	Yes	No
1. Cleaned out pen well -	____	____
2. Provided plenty of fresh straw/chips -	____	____
3. Put up name sign -	____	____
4. Put up barn decorations -	____	____
5. Placed show box in a non-traffic area -	____	____
6. Placed hay, feed, straw, and pails in a non-traffic area -	____	____
7. Checked to see tie ring was secure -	____	____
8. Tied neck strap rope to tie ring -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Hammer; wire; nail; signs; decorations; show box; pail; feed; straw; hay; fork; neck strap; tie rope	

Duty: Showing Beef	**Duty No.** G
	Task No. 7

Task: Prepare exhibitor to show, using appropriate resources, to assure that both exhibitor and animal are presented appropriately to the judge.

Achievement Indicators: The learner:	Yes	No
1. Knew the time of the show -	____	____
2. Prepared the animal well in advance of the show -	____	____
3. Secured show ring number from superintendent -	____	____
4. Knew the class the animal will show in -	____	____
5. Changed into clean clothes just prior to show -	____	____
6. Washed hands and face and combed hair -	____	____
7. Entered show ring on time -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Show ring number Clean clothes Soap Comb	

Duty: Showing Beef	**Duty No.** G
	Task No. 8

Task: Show animal, using appropriate techniques, to display animal to its best advantage.

Achievement Indicators: The learner:

	Yes	No
1. Entered ring early -	____	____
2. Kept animal on outside of ring - leading steer counterclockwise -	____	____
3. Observed judge keeping steer between you and judge -	____	____
4. Walked animal slowly with head up -	____	____
5. Kept animal from crowding animal in front of it -	____	____
6. Lined animal up and set up correctly when asked -	____	____
7. Followed judge's and/or ring man's direction -	____	____
8. Remained alert and kept showing until all animals are placed -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are performed according to the supervisor's satisfaction.

Tools and Equipment:

Show area
Halter
Show stick
Judge

Resources:

Duty: Using Employability Skills	**Duty No.** H
	Task No. 1

Task: Perform a self-assessment, using knowledge and information, to compile a list of personal attributes.

Achievement Indicators:

The learner:	Yes	No
1. Listed work-related accomplishments -	____	____
2. Listed non-work related accomplishments -	____	____
3. Identified skills and competency attainment -	____	____
4. Identified transferable (portable) skills -	____	____
5. Determined strengths and weaknesses -	____	____
6. Described job liabilities and the effect liabilities have on employment opportunities -	____	____
7. Developed a plan to overcome job liabilities -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "First Steps" in Opening Doors: A Practical Guide for Job Hunting. Continuum Center, Oakland University, 1984, pp. 7-14.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 2

Task: Perform a self-assessment, using knowledge and information, to identify areas of work that will provide personal job satisfaction.

Achievement Indicators: The learner:

	Yes	No
1. Listed personal job values -	____	____
2. Rated each job value -	____	____
3. Listed enjoyable activities/interests -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:
Ibid, pp. 16-20

Duty: Using Employability Skills	**Duty No.** H
	Task No. 3

Task: Perform a self-assessment, using knowledge and information, to determine methods to reduce levels of stress.

Achievement Indicators:

The learner:	Yes	No
1. Identified stages of grief that result in stress -	____	____
2. Identified factors that reduced levels of stress -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**
	Ibid, pp. 21-23

Duty: Using Employability Skills	**Duty No.** H
	Task No. 4

Task: Compile an occupational profile, using reference materials, to determine the characteristics, requirements, and employment outlook of an occupation.

Achievement Indicators:

The learner:	Yes	No
1. Described:		
a. Main job duties -	____	____
b. Places of employment -	____	____
c. Physical demands -	____	____
d. Working (environmental) conditions -	____	____
e. Educational requirements -	____	____
f. Local, regional and national employment outlook -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Dictionary of Occupational Titles (D.O.T.).

Goodman, Jane, Judith Hoppin and Ronald Kent, "Making Decisions," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 27-34.

Michigan Occupational Information System (M.O.I.S.)

Duty: Using Employability Skills	**Duty No.** H
	Task No. 5

Task: Investigate non-wage job characteristics, using available resources, to identify significant job factors.

Achievement Indicators: The learner:	Yes	No
1. Listed and described:		
a. Union affiliation -	____	____
b. Apprenticeship opportunities -	____	____
c. Occupational hazards -	____	____
d. Shift requirements -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Dictionary of Occupational Titles (D.O.T.).
Goodman, Jane, Judith Hoppin and Ronald Kent, "Making Decisions," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 27-34.
Michigan Occupational Information System (M.O.I.S.)

Duty: Using Employability Skills	**Duty No.** H
	Task No. 6

Task: Develop goals, using knowledge, to determine career objective(s).

Achievement Indicators: The learner:

	Yes	No
1. Listed short-term goals-	____	____
2. Listed long-term goals -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Ibid, pp. 30-31

Duty: Using Employability Skills	**Duty No.** H
	Task No. 7

Task: Perform a job search, using information, to identify employment opportunities.

Achievement Indicators: The learner:

	Yes	No
1. Determined geographic boundaries for job search -	____	____
2. Listed types of potential places of employment -	____	____
3. Developed a list of prime sources of information concerning opportunities for employment, advertised and unadvertised -	____	____
4. Gathered information about advertised and unadvertised job openings -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin, and Ronald Kent, "Planning the Campaign," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 37-47.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 8

Task: Participate in an information interview, using knowledge and resources, to obtain information about a job from an employer.

Achievement Indicators:

The learner:	Yes	No
1. Identified a job within the area of occupational interest -	____	____
2. Prepared a list of organizations that employ people to perform the identified job -	____	____
3. Scheduled an interview appointment with an employer at one of the organizations -	____	____
4. Prepared a list of questions for the interview -	____	____
5. Conducted the interview -	____	____
6. Prepared a follow-up letter to mail, after the interview, to the employer -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "Planning the Job Campaign," Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 44-45.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 9

Task: Complete a social security form, using information, to apply for a social security number.

Achievement Indicators: The learner:

	Yes	No
1. Contacted appropriate office to secure form -	____	____
2. Followed instructions on form -	____	____
3. Filled in each space on the form with the correct information -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**
	"Handling the Paperwork," Employability Skills Guide #6, MSU.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 10

Task: Contact an employer, using a telephone, to pursue potential employment opportunities.

Achievement Indicators: The learner:

	Yes	No
1. Greeted receptionist -	____	____
2. Identified self and reason for phone call -	____	____
3. Asked to speak to appropriate person -	____	____
4. Arranged, if necessary, a time to call back -	____	____

Criteria: Competence in the task will be recognzied when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin, and Ronald Kent, "Communicating with Employers," in Opening Doors: A Practical Guide for Job Hunting, Oakland University, 1984, pp. 54-57.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 11

Task: Complete a job application, using personal notes, to apply for employment.

Achievement Indicators:

The learner:	Yes	No
1. Followed the direction specified on the application form -	____	____
2. Filled in each space where applicable, with the correct information -	____	____
3. Used a pen or typewriter to fill in application information -	____	____
4. Filled out the application neatly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin, Ronald Kent, "Communicating with Employers," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 61-64.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 12

Task: Prepare a resume, using personal information, to apply for a job.

Achievement Indicators: The learner:

		Yes	No
1.	Listed name, address, and telephone number -	____	____
2.	Identified career objective -	____	____
3.	Listed work experiences -	____	____
4.	Described job-related experiences -	____	____
5.	Provided information about education -	____	____
6.	Listed military experience, if acquired -	____	____
7.	Described home/community activities -	____	____
8.	Listed membership in work related organizations/ associations -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "Communicating with Employers," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 58-59, 65-71.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 13

Task: Write a letter, using personal notes, to apply for a position.

Achievement Indicators: The learner:

	Yes	No
1. Included:		
a. Name, address, and phone number -	____	____
b. Date -	____	____
c. Name, title, firm, address of person to whom the letter is being sent -	____	____
d. Salutation -	____	____
2. Indicated in paragraph one:		
a. An awareness of the business -	____	____
b. A reference to an ability/skill that will benefit the company -	____	____
3. Emphasized experience, abilities, accomplishments, in paragraph two -	____	____
4. Identified strengths/special training in paragraph three -	____	____
5. Included a follow-up plan in paragraph four -	____	____
6. Included complimentary closing -	____	____
7. Signed letter -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman Jane, Judith Hoppin and Ronald Kent, "Communication with Employers," in Opening Doors: A Practical Guide for Job Hunting. Continuum Center, Oakland University, 1984, pp. 72-73.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 14

Task: Demonstrate appropriate dress, using a knowledge of job requirements, to comply with standards of on-the-job attire and grooming.

Achievement Indicators:	The learner:	Yes	No
1.	Described and/or dressed in the attire of the appropriate occupational area, including:		
	a. Grooming -	____	____
	b. Health -	____	____
	c. Uniforms -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin, and Ronald Kent, "The Job Interview," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 77-96.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 15

Task: Interview for a job, using communication skills, to secure employment.

Achievement Indicators:

The learner:	Yes	No
1. Demonstrated appropriate characteristics for job applicants including:		
a. Attire -	____	____
b. Grooming -	____	____
c. Conduct -	____	____
2. Demonstrated correct usage of interviewing techniques -	____	____
3. Prepared a list of questions to ask the interviewer -	____	____
4. Prepared a follow-up letter to mail, after the interview, to the interviewer -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "The Job Interview," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 77-96.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 16

Task: Contact a job interviewer, using a telephone, to accept/reject a job.

Achievement Indicators: The learner:	Yes	No
1. Spoke with interviewer who offered the job -	____	____
2. Identified self -	____	____
3. Accepted offer, if applicable -	____	____
4. Found out starting date and time, if appropriate -	____	____
5. Rejected offer courteously and politely, if applicable -	____	____
6. Gave reason for rejection, if applicable -	____	____
7. Concluded conversation correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**
	"Getting the Job," Employability Skills Guide #9, MSU. Ibid, pp. 77-96.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 17

Task: Complete forms, using information, to withhold city, state and federal taxes.

Achievement Indicators: The learner:

	Yes	No
1. Completed city tax form correctly -	____	____
2. Completed state form correctly -	____	____
3. Completed federal tax form correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**

Duty: Using Employability Skills	**Duty No.** H
	Task No. 18

Task: Describe performance evaluation measurements, using knowledge, to identify behavior/attitudes that employers expect employees to exhibit on the job.

Achievement Indicators: The learner:	Yes	No
1. Listed and described the methods to achieve successful working relationships -	____	____
2. Listed and defined importance of:		
a. Reliability -	____	____
b. Punctuality -	____	____
c. Quality -	____	____
d. Quantity -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "Opening the Door to Your Future," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 99-100.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 19

Task: Perform a continuing education program search, using available resources, to identify opportunities for retraining, skills upgrading, and career advancement.

Achievement Indicators: The learner:	Yes	No
1. Described types and sources of continuing education programs for an occupation -	____	____
2. Related information to career alternatives -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin, and Ronald Kent, "Opening the Door to Your Future," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, p. 101.

Duty: Using Employability Skills	**Duty No.** H
	Task No. 20

Task: Analyze career information, using available resources, to identify the opportunities for advancement that exist within an occupation.

Achievement Indicators:

The learner:	Yes	No
1. Described the career stages associated with the occupational areas:		
a. Listed jobs, entry through advanced levels -	____	____
b. Gave examples of tasks that employees in the occupation are required to perform -	____	____
c. Identified tools/equipment that employees in the occupation use -	____	____
d. Made reference to the relationship of the job(s) to data, people, and things -	____	____
e. Made reference to education and/or on-the-job training needed to attain career mobility -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Dictionary of Occupational Titles (D.O.T.).

Goodman, Jane, Judith Hoppin and Ronald Kent, "Opening the Door to Your Future,: in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 99-102.

Michigan Occupational Information System (M.O.I.S.).

Duty: Using Employability Skills	**Duty No.** H
	Task No. 21

Task: Describe job resignation/dismissal practice, using knowledge, to identify positive methods for terminating an employment situation.

Achievement Indicators: The learner:	Yes	No
1. Described practice for resigning from a job:		
a. Gave two weeks to a months notice -	____	____
b. Specified a positive reason for leaving the employment situation -	____	____
2. Described practices for job dismissal (laid-off, released):		
a. Asked the employer for a letter of reference if laid off -	____	____
b. Talked with the employer to discover what was the problem, if released -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**
	"Knowing the Score," Employability Skills Guide #10, MSU.

TOOL AND EQUIPMENT LIST
FOR BEEF

Equipment	Duty
Adjustable wrenches	C, F
Balling gun	D
Barn chart	A
Black light	C
Breeding wheel	A
Broom	C, D
Brush	C, E
Bucket	B, D, G
Calculator	A, B, C, E
Canes	A
Canisters	A
Cattle chute	D
Chin-ball marker	A
Clippers	A, G
Combs	G
Ear tags	A, B
Elastrator	D
Elastrator rings	D
Electric dehorner	D
Feeder	B, C
Fetal extractor	B
Forceps	D
Freeze brander	B
Frick speculum tube	D
Gestation chart	A
Gouge dehorner	D
Grain probe	C
Grease gun	C
Grinding equipment	C
Guillotine dehorner	D
Gutter cleaners	E
Halter	G
Hammer	B, E, F
Hand saw	E

TOOL AND EQUIPMENT LIST (Cont.)

Equipment	Duty
Hand tools	E
Headgate	C, D
Hoof chisel	B
Hoof knife	B
Hoof nippers	B
Hoof rasp	B
Hoof trimmers	G
Hot branding iron	B
Hurdles	B
Implant gun	C
Incinerator	B, D
Insecticide applicator	D
Knife	D
Liquid manure spreader	E
Livestock markers	F
Loading chute	B, F
Manure spreader	E
Measuring containers	D
Metal cabinet	B
Microcomputer	A, B, C, E
Moisture meter	C
Neck chains	B
Neck strap	G
Newberry castrator	D
Nitrogen tank	A
Obstetrical chains and handles	B
Oral drench syringe	D
Paste dispenser	D
Patch heat detector	A
Permanent markers	B
Pitch fork	E, G
Plastic sleeve	A
Plastic squeeze bottle	D
Pressure washer	D
Protective clothing	D
Protective glasses	D

TOOL AND EQUIPMENT LIST (Cont.)

Equipment	Duty
Rectal thermometer	D
Rope	D
Rubber boots	D
Rubber gloves	B, C
Rubber tubing	D
Ruler	D
Scales	A, B, C, F
Scalpel	D
Scissors	D
Scoop dehorner	D
Scraper	D, E
Semen	A
Semen tank	A
Shovel	C, D, E
Show box	G
Show stick	G
Specimen containers	D
Stomach tube	D
Straw insemination gun	A
String	D
Syringe	B, C, D
Telephone	C, F
Thermometer	B, D
Tractor	D
Tractor with carriage	D
Trocar and cannula	D
Truck	B
Tweezers	D
Wagon	D
Waterers	B, C

STUDENT ACHIEVEMENT RECORD

BEEF

STUDENT _____

INSTRUCTIONS:

Mark each student's level of competence according to the following guide:

LEVEL	GUIDE
1	Student has been exposed to task
2	Task accomplished with assistance
3	Task accomplished to criteria by student
4	Ability to teach or demonstrate the task to others

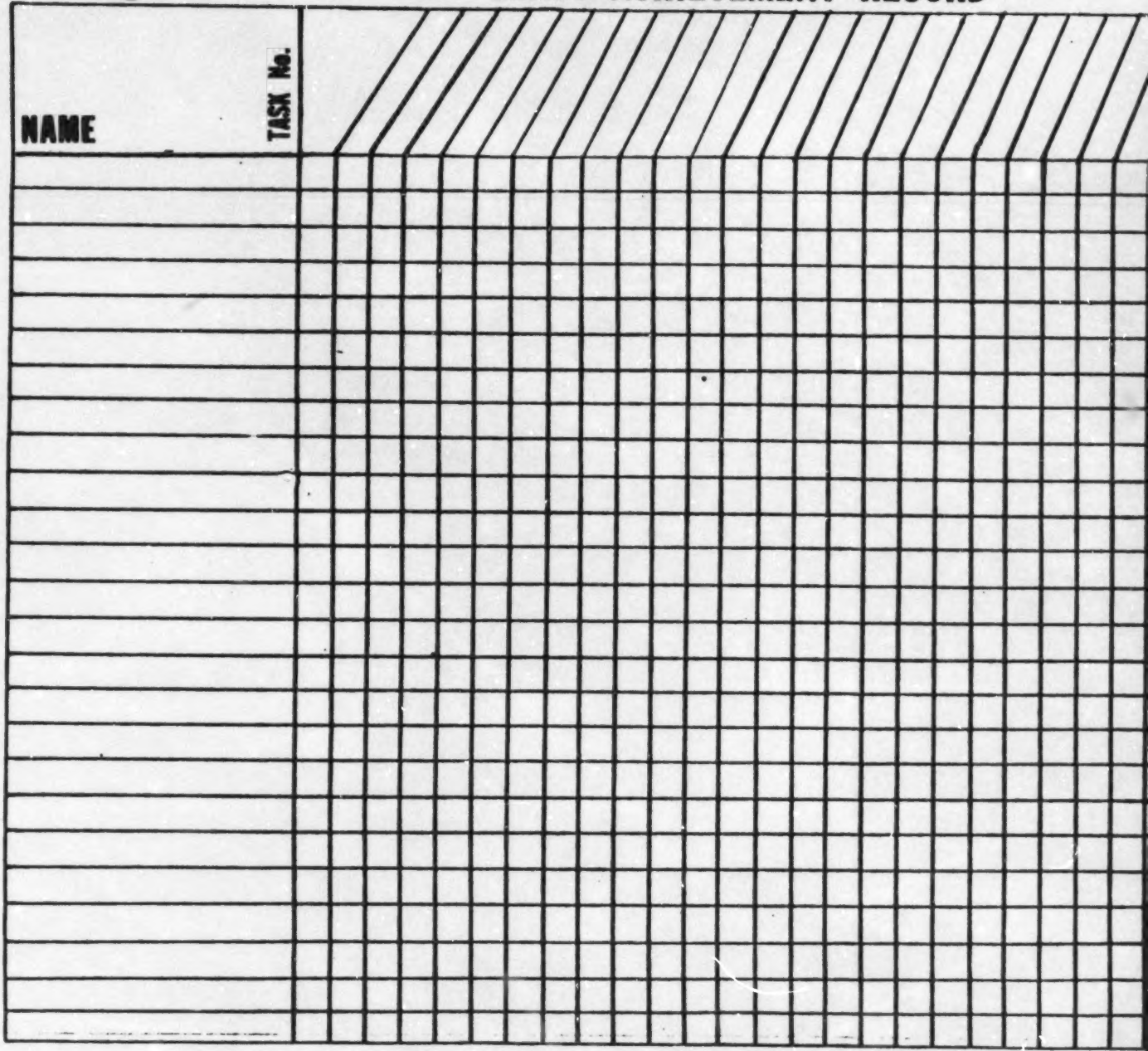
TASK	LEVEL	DATE
A. BREEDING BEEF		
1. Plan breeding system.		
2. Select breeding stock.		
3. Keep breeding and calving records.		
4. Determine number of bulls needed for cow herd.		
5. Determine when to breed cows and heifers.		
6. Keep records of due dates for cows and heifers.		
7. Select feeder animals.		
8. Select breeding stock for embryo transfer.		
9. Detect heat in cows and heifers.		
10. Breed cows and heifers.		
11. Arrange pregnancy check for bred cows and heifers.		
12. Store semen.		
13. Cull animals.		
B. CARING FOR BEEF		
1. Plan livestock operation goals for the farm.		

TASK	LEVEL	DATE
B. CARING FOR BEEF (continued)		
2. Make inventory list such as cattle.		
3. Prepare production performance records.		
4. Identify animals.		
5. Assist animals in delivering young.		
6. Remove afterbirth.		
7. Check mother's milk supply.		
8. Wean calves.		
9. Record weaning weights of calves.		
10. Weigh animals.		
11. Move feeder animals to feedlot.		
12. Fill out application for registration with purebred cattle association.		
13. Dispose of unused chemicals and drugs.		
14. Store chemicals.		
15. Care for animal's feed.		
C. FEEDING BEEF		
1. Balance ration and creep feed calves.		
2. Balance and feed ration to beef bulls.		
3. Balance and feed ration to beef show animals.		
4. Balance and feed ration to fattening cattle.		
5. Balance and feed ration to replacement heifers.		
6. Balance and feed ration to weaned beef calves.		
7. Balance and feed ration to wintering brood cows and heifers.		
8. Balance and feed ration to gestating brood cows and heifers.		
9. Balance and feed ration to lactating brood cows and heifers.		
10. Prepare beef feeding records.		
11. Select feeding methods.		
12. Calculate the cost of gain on feeder steer operation.		
13. Calculate cost of rations and feed mixtures.		

TASK	LEVEL	DATE
C. FEEDING BEEF (continued)		
14. Implant feeder steers with growth stimulant.		
15. Determine feeding and watering space requirements.		
16. Examine feedstuffs for mold and spoilage.		
17. Precondition animals for shipping.		
18. Service grinding and mixing equipment.		
19. Service bulk feed handling equipment.		
20. Prepare ration for beef.		
21. Order feed.		
D. MAINTAINING BEEF HEALTH		
1. Examine beef for external parasites.		
2. Apply insecticides in buildings.		
3. Dust cattle.		
4. Spray cattle.		
5. Examine beef for internal parasites.		
6. Deworm with paste/bolus.		
7. Drench cattle.		
8. Treat cattle for internal parasites.		
9. Plan a general health program.		
10. Take temperature of sick animal.		
11. Administer medication by injection.		
12. Administer medication to animals orally.		
13. Applied medication to cuts and bruises.		
14. Treat cattle for contagious diseases.		
15. Treat calves for scours.		
16. Vaccinate calves for black leg.		
17. Vaccinate calves for leptospirosis and anaplasmosis.		
18. Vaccinate heifers for Brucellosis (Bang's Disease).		
19. Clip naval.		
20. Castrate animals with elastrator.		
21. Castrate animals with knife.		
22. Dehorn animals.		

TASK	LEVEL	DATE
D. MAINTAINING BEEF HEALTH (continued)		
23. Treat bloated animals.		
24. Implant magnets.		
25. Isolate newly purchased animals.		
26. Separate sick, weak or injured animals.		
27. Treat cattle for foot rot.		
28. Treat cattle for maggots.		
29. Treat cattle for pink eye.		
30. Treat cattle for pneumonia.		
31. Treat cattle for shipping fever.		
32. Treat cows for mastitis.		
33. Dispose of dead animals.		
34. Disinfect building and equipment.		
35. Clean housing.		
E. MAINTAINING BEEF FACILITIES		
1. Plan for housing for cow and calf herds and cattle feed lot.		
2. Clean and adjust waterers for beef.		
3. Construct feed trough.		
4. Construct creep feeder.		
5. Construct loading chute.		
6. Build trim chute.		
7. Construct back-scratcher for insecticide application.		
8. Plan waste disposal system.		
9. Remove wastes.		
10. Apply wastes to fields.		
F. MARKETING BEEF		
1. Consign outstanding animals to sale.		
2. Plan marketing schedule.		
3. Calculate expected returns and profits on sales.		
4. Calculate shrinkage.		
5. Estimate market grades.		
6. Select markets.		

TASK	LEVEL	DATE
F. MARKETING BEEF (continued)		
7. Sort and mark steers for market.		
8. Cull animals for sale.		
9. Prepare carriers for hauling animals.		
10. Load animals.		
G. SHOWING BEEF		
1. Select animals for showing.		
2. Select equipment for fitting and showing.		
3. Train animal for showing.		
4. Transport animals to show.		
5. Groom beef for show.		
6. Prepare facilities (pen, staff, etc.) at show.		
7. Prepare exhibitor to show.		
8. Show animal.		
H. USING EMPLOYABILITY SKILLS		
1. Perform a self-assessment to compile a list of personal attributes.		
2. Perform a self-assessment to identify areas of work that will provide personal job satisfaction.		
3. Perform a self-assessment to determine methods to reduce levels of stress.		
4. Compile an occupational profile.		
5. Investigate non-wage job characteristics.		
6. Develop goals.		
7. Perform a job search.		
8. Participate in an information interview.		
9. Complete a social security form.		
10. Contact an employer.		
11. Complete a job application.		
12. Prepare a resume.		
13. Write a letter.		
14. Demonstrate appropriate dress.		
15. Interview for a job.		
16. Contact a job interviewer.		

TASK	LEVEL	DATE
H. USING EMPLOYABILITY SKILLS (continued)		
17. Complete forms.		
18. Describe performance evaluation measurements.		
19. Perform a continuing education program search.		
20. Analyze career information.		
21. Describe job resignation/dismissal practice.		

CLASS ACHIEVEMENT RECORD